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UNITED STATES DEPARTMENT OF AGRICULTURE
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UNCLE SAM AT YOUR SERVICE

Monday, January 5, 1931.

NOT FOR PUBLICATION

SPEAKING TIME: 10½ minutes.

ANNOUNCEMENT: How much do you know about oysters? Do you know where they come from and how they are gathered? Do you know that they must pass certain regulations for purity and wholesomeness before they reach your table? The Veteran Inspector is going to give you that information in his UNCLE SAM AT YOUR SERVICE talk today. This is made possible through a cooperative agreement between the United States Department of Agriculture, whom the Inspector represents, and Station_____. Here is the Inspector---.

----ooOoo----

A few red and brown leaves still hung on the trees along the shores of the Chesapeake Bay country when we set out with the oyster men. The water was colder. In the early morning, the air sparkled and snapped. Maybe there's frost on the grass. Restaurants in the city have the sign out: Oysters R in Season.

And oysters are in season in the waters of the Chesapeake, the Potomac, the New York, Virginia and Maryland waters, where so much of America's supply comes from. Oysters are in season all down the east coast of the United States, in the Gulf of Mexico, and in the waters of the Northwest. It's oyster time and, for a month now, the dredgers have been busy in Monroe Bay, off Solomons Island, off Old Point Comfort.

So we picked an early morning--- a morning as calm and still as the proverbial oyster we were going to dredge for--- and went out with the oyster men. We put off in a sloop, or a bug-eye fishing smack, or a skip-jack, long before sunrise. Of course, we could go out in a small boat with the tongers who use iron rakes with long wooden handles and who work hard all day for a few bushels of oysters. But that day, we went out in a little sailing vessel with the dredgers, bound for Kettle Bottom Shoals.

The wind was right. The Cap'n was getting his crew out of their bunks on board. We smelled coffee and bacon and beans. We ate. And we were off.

As we arrived at the Shoals, the sun was rising. All around us were scores of all manner of small boats and ships. Fifty drudgers--- as they call them in this country---arrived ahead of us. We had a hard time maneuvering for position. These men who follow the water are bold and hard. The oyster men give, and take, no quarter. In days gone by, they used to fight for their rights to a promising bottom with rifles

and machine guns. There's more than one grave on My Leg Island and on The Point where a drudger lies in the long sleep, alone and unknown.

Our boat was all fixed up with fresh paint and new sails. Her deck was sheathed with planking specially laid for the drudging. The crew dropped the dredges into the blue water. The Cap'n at the wheel, had a thousand eyes. It was HIS job to watch canvas, men, dredges, the winders, everything. "Let 'er go," he said. The dredge went over the side. It's a large thing like a basket with a bottom of iron bars, spiked at the end. It is handled with ropes and pulleys, controlled from the deck. These pointed iron rods scrape over the bottom as the ship sails by. Oysters are dredged up and dumped on deck. Along with the oysters, is a good load of mud and pebbles, rocks and oyster shells. Then the cullers get busy. With their little hammers, they separate the masses of oysters--- throw away those that are under the legal size--- and shovel the deck clean of mud and sand from down under. The whole job done, the oysters are dumped into the hold and we're all set to do the job all over again. We eat about noon and by the middle of the afternoon, set our sails for home....

We weren't alone out there. The waters of Maryland and Virginia are splendidly suited to the curious life of the oyster and the oyster business gives employment and a living to thousands of men and women in these 2 States. As for the oysters, they want a water of just the right salt content. Not too fresh--- not too salt. They also like water of a certain temperature. They find these conditions in few places. But where the oysters grow well, you generally find the oyster men perfectly willing to take a long chance in a hard calling. It takes a lot of oysters to satisfy the public. There's money in the game.

And to get that money, some oyster men have resorted to dangerous and dishonest practices. Some still do. By dangerous practices, I don't refer to the oyster wars of an earlier day. By dishonest practices, I don't mean ramming or wrecking your rival's dredging boat. The State police handle those affairs. But there are other practices where Federal pure food officials and inspectors step into the picture. Take the practice of swelling by the addition of water, for example. This practice increases the size of the oysters so that you'll get fewer oysters to the gallon. The moisture content of an oyster will average between 77 and 83 per cent. The English type of oyster will weigh about 142 grains. Now, here's a practical tip for you when you buy oysters. If the oysters are bloated, almost white and bleached, with soft, spongy flesh, and of little flavor and with the meat almost entirely lacking in a salt flavor --- and if, when drained, they show much thin, watery liquor--- the chances are 10 to 1 that they have been soaked, or adulterated with excessive quantities of water. This may have been added by soaking or floating in fresh water before or after shucking, through improper draining after washing, or, through deliberate addition of water to the cans at the time the oysters were packed or after receipt by the retailer. Such practices are in violation of the pure food laws and it is the duty of officials of the Food and Drug Administration, and of the State Pure Food Officials, to detect them and take action. I have seen oyster men load their catch on a raft--- tow it to fresh water--- and weight the raft down with stones

so plenty of fresh water will flow through the oysters. The oysters take up moisture rather readily. The water adds to their weight. But excess water does not improve the quality of the oysters and the practice of thus adding excessive water is labeled as ADULTERATION by the pure foods officials.

Another violation of the pure foods law, so far as oysters are concerned, that we inspectors have to keep watch for is short measure in the cans. Under the food and drugs act, the container of foods and drugs must be plainly labeled with the net contents, the net weight, or volume of the can. In this way, the buyer is protected.

Federal inspectors and state inspectors as well in oyster producing, packing, or shipping regions, make every effort to see that America's oyster supply is wholesome and up to standard. They go out in the boats with oyster men and check on operations. They make certain that the oyster beds are protected from pollution. They visit the shucking plants and see that the oysters are up to standard in size, texture, color, flavor, and salt content. They also check up at the receiving end—— that is, they sample shipped oysters when they arrive at their destination and if they find the bi-valves adulterated, or being sold short-measure, they either seize the shipment or require that the shippers make the necessary corrections. My inspector colleagues agree with me that it is rare to find stale or decomposed oysters. Such a product would make itself apparent by its odor. And, taking the oyster industry as a whole, it's quite rare even to find cases of soaking or other adulteration, or of short measure in the cans, these days. I suppose that the oyster men have long since come to the conclusion that it pays best in the long run to sell a perfectly honest product honestly labeled. At any rate, the honest oystermen have gotten the upper hand. But we inspectors are hired to watch the markets and the oyster plants to see that the few who occasionally adulterate or sell short measure don't delude the buyer.

Oysters are the most important of the shellfish products, both from an economical and regulatory standpoint. But there are other important shellfish and sea food products and I want to mention them briefly before I close today. Clams and scallops are popular foods. They are gathered along the entire Atlantic coast and on the coasts of Oregon and Washington. Crabs abound in the waters of the bays and inlets along the Atlantic coast. Shrimp swarm in the waters of bayous and the lower reaches of the Mississippi. Lobsters, spiny lobster, abalone, and even crayfish, though rather limited in quantity as compared with oysters, occasionally need attention from the pure foods officials. Considerable quantities of these products are packed and sold to the public in the fresh or canned state. At one time, the sanitary conditions in the canning or packing plants were none too good. Federal food officials made a survey of the entire industry in 1927-28 and issued recommendations on how to make the plants more sanitary. A check up survey was later made and the Food and Drug Administration now says that conditions in the plants are greatly improved. Now and then, as the inspectors make their rounds, they find examples of short measure, adulteration, or other forms of violation of the pure food law, and corrective steps are then promptly taken. The industry, as I said before, is highly

localized. Crab meat is packed in Maryland and Virginia and along the Gulf Coast. Scallop packing is confined to the eastern shore of Virginia, parts of Georgia, the Carolinas, Massachusetts, and possibly a few other localities. Shrimp and clams, also, are found on most tables, but the shrimp- and clam-packing industries are centralized. States are cooperating with the Federal government in cleaning up where cleaning up is necessary.

Before I turn the microphone over to somebody else, I'd like to say that Technical Bulletin Number 64 contains a lot of interesting facts about oysters. If you are interested, you can have a free copy by writing for it. But get your order in early--- there aren't many left. Ask for Technical Bulletin No. 64.

---oOo--

ANNOUNCEMENT: That was the Veteran Inspector you just heard. Through a cooperative arrangement between the United States Department of Agriculture and Station_____, he comes to us each Monday with a 10-minute talk on what the Food and Drug Administration of the Department is doing. You are cordially invited to hear him next week at this hour. Meanwhile, write him in care of this Station if you want a free copy of Technical Bulletin 64, on oysters. Or, you can send direct to the U. S. Department of Agriculture, Washington, D.C., for it.

UNITED STATES DEPARTMENT OF AGRICULTURE
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UNCLE SAM AT YOUR SERVICE. RELEASE: Monday, January 12, 1931

NOT FOR PUBLICATION

SPEAKING TIME: 10 minutes.

ANNOUNCEMENT: Does the eye guide purchasers in buying food? The Veteran Inspector, who represents the Federal Food and Drug Administration at Station_____, thinks it does. And in his talk on artificial colors in foods--- which he is ready to give you now--- he is going to tell why. It's an interesting story. And here's the Inspector ready to tell it.

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The New-Age housewife, eagerly modern, wants her new car to match her frocks. Accessories must blend into the car tints. And it's even possible to dye the dog to harmonize. ....

We have become color-conscious. No more the drab colorless things of yesterday. Why, a man can even wear a scarlet necktie without some one calling the officers of the law.

And, today, to satisfy her color-conciousness, madam may, with the approval of Government scientists, have food to match her dishes. Blue cereals--- if she wants them--- to harmonize with the blue breakfast dishes.

Come with me to a dinner. A strange dinner--- but not impossible. We are served with chicken broth a wild green in color. Followed by black fish. Then comes the roast--- snow white. With pink peas on the side. And violet potatoes. And cerise asparagus. Red bread. The salad blue--- with some yellow leaves. The pie is also blue. And the CHEESE is Royal Purple.

All possible. But what would you do? Would you throw your napkin down and get up from the table pale with fright or anger? Would you consider it a situation? Would you make a speech? Or would you tell your hostess that you were on a diet and that your doctor had told you not to eat rainbows?

It would be a delicate test of etiquette. You could tell your hostess that you liked your peas green--- not pink--- and that, since your youth, you had avoided purple potatoes. ...

But WHY?

Well, from the beginning of something or other brilliant coloring has been one of the devices of nature to call attention to the ripest berries and the sweetest fruit. And man, through thousands of years of experience, has learned to associate certain colors with certain foods. The loss of this coloring has been nature's warning. We avoid the over-ripe strawberry or tomato--- except for ammunition purposes--- as much through our color sense as our taste sense. We have learned to connect certain color with quality in foods. And we turn from the pallid pea or the bloodless beet largely because we have learned that that which is not fair to the eye may play mean tricks on the digestion. Now, it's perfectly true that a food that fails to please one's sense of beauty may be perfectly good to eat. The drab catsup produced in the home kitchen may be far more wholesome than the vivid product of some dubious manufacturer. Nevertheless--- not being accustomed to pieces of scarlet pepper in my food--- it took me a long time, in Mexico, to learn that the people were not trying to poison me in the interests of experimentation.

Back in cave-man days--- when our forefathers went courting armed with a stout club--- mostly raw food was eaten. I suppose you all know Charles Lamb's story of how one of the innocent ancients first learned the delights of roast pig. It seems that this primitive gentleman kept his pig in some sort of crude thatched hug and one night the hut caught fire and burned to the ground. The pig burned, too. And next morning, poking around in the ruins, the gentleman found the remains of his pig. He explored it with his finger and then, in a childish way, stuck the finger into his mouth. The flavor lasted. He tried it again--- this time taking a piece of the roast and eating it. He decided he liked roast pig better than the raw article and for many years it was the custom in that locality to burn huts down in order to cook pork. It took some time to teach them that a cheaper fire would do just as well.

And it has taken MODERN man some time to learn that, with the development of modern food habits, the judicious use of harmless color adds gustatory enjoyment to our meals. The ancients knew about VEGETABLE colors--- they used them to decorate their clothing, their skins, their weapons, their buildings. But they found that vegetable colors suffered from cooking. Then they began to use colors or pigments made from MINERALS. These were widely adopted, although they included the highly poisonous yellow chromate of lead and red sulphide of mercury.

Then came the coal-tar dyes. You may not know it, but you can take black coal tar into a chemical laboratory and make from it all the colors of the rainbow and many of the flavors that please the palate--- ALL ARTIFICIALLY. And in the early days of color development, these coal-tar dyes were used indiscriminately and without much regard to whether they were poisonous or not. About the only limiting factors were shade and cost. The color makers didn't seem to worry very much whether their colors were poisonous or not. Cases of poisoning traceable to artificial colors appeared often. And so a strong prejudice against these coal-tar--- or aniline--- dyes arose and the cry went up:

ALL ANILINE DYES ARE POISONOUS!

This is untrue, of course--- but some aniline dyes most certainly are poisonous. Then the public asked:

WELL, HOW CAN WE TELL THEM APART?

Chemists in all parts of the world went to work to settle that question. They found that coal-tar dyes could be divided into three classes: Poisonous, doubtful, and harmless. Then, in 1906, the food and drugs act was passed. The question of artificial color in foods was one of the first matters taken up.

In the early days, artificial colors were commonly used in food to cover up a change of shade due to damage or adulteration of the food itself. Mineral salts of all kinds were freely used and brilliant compounds of lead, mercury, and copper found their way into materials intended for food. Some of these certainly should never have been put into foods.

Now, what's the moral?---

Let me tell it in my own way. I spent a couple of hours recently in the laboratory of a trained chemist employed by the Federal Food and Drug Administration to test foods for artificial colors and flavors. He showed me some of his laboratory notes. I saw there accounts of how scores of different foods had been colored artificially as proved by laboratory tests. In many instances, the color had been used to conceal definite inferiority or damage in the product and was thus a means of cheating the purchaser and a violation of the pure food laws as well. Among the foods mentioned were: confections, fish, fountain sirups, tomato pastes and catsups, preserved fruits, and so on. The Government expert told me that they extract the dye from the food by a chemical process. Then they deposit it on a strip of wool or other fabric where it is tested to determine whether it is harmful or not. While the use of artificial color in foods may easily be abused, there are cases where it's perfectly proper to use it and perfectly legal under the food and

drugs act.

Recognizing the abuses that may be involved in the artificial coloring of foods, the Food and Drug Administration has never encouraged manufacturers to employ such coloring. However, the food and drugs act does not prohibit the use of coal-tar dyes unless they are harmful to health or unless their use results in deceit through concealment of damage or inferiority in the food. Since colors may legally be used in foods, the Government sees to it that the ones employed are strictly harmless. And, since some consumers wish to discriminate against or in favor of artificially colored foods, the Government requires, in general, that edibles so colored be labeled to show the presence of the added color. As I said before, there are thousands of artificial coal-tar colors, some of which are harmless and a few of which are poisonous. When the Government took over the regulation of the use of these dyes, back in 1907, seven colors, offering a wide variety of shades, were selected as suitable for use in foods. Since that time, the Government has made additions to the permitted list in the shape of certain NON-INJURIOUS, coal-tar colors. The permitted list now includes 15 different dyes. To assure the public of pure and harmless colors, the Government issues certificates to all manufacturers who submit samples of each batch of dye for examination--- IF THESE BATCHES MEET THE VERY RIGID REQUIREMENTS OF PURITY THAT HAVE BEEN ESTABLISHED. Such colors are known as CERTIFIED COLORS. The name, CERTIFIED, has become widely recognized as the Government's guarantee of purity and harmlessness in coal-tar food colors. That word, CERTIFIED, when applied to a color, is the buyer's guarantee of purity, the consumer's assurance of safety.

Would you like a free bulletin describing how colors are certified? Then send for a copy of F. D. 3, called CERTIFICATION OF COAL-TAR FOOD COLORS. It's published by the Food and Drug Administration and it's free.

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ANNOUNCEMENT: You have been listening to the Veteran Inspector tell another way in which Uncle Sam protects the food buyer and consumer. His UNCLE SAM AT YOUR SERVICE talks are broadcast each Monday by Station___, in cooperation with the United States Department of Agriculture. Write this Station if you want a free copy of F. D. 3, called CERTIFICATION OF COAL-TAR FOOD COLORS.

UNITED STATES DEPARTMENT OF AGRICULTURE
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UNCLE SAM AT YOUR SERVICE. Monday, January 19, 1931.

NOT FOR PUBLICATION

SPEAKING TIME: 10 Minutes.

ANNOUNCEMENT: If you have been listening to the Veteran Inspector during the past weeks, you will know something about the pure food laws. He is a radio spokesman for the United States Department of Agriculture at Station _____. And, in his UNCLE SAM AT YOUR SERVICE talks, he has told us a lot about the laws that protect our pantries and medicine cabinets. He says that a law---even a good law---will not enforce itself. Today he is going to tell you why. Mr. Inspector---

---ooOoo---

Years ago, when I lived on a cattle ranch, it was my job to help keep up the fences. . . .

Of course, I had plenty of other work to do---milking cows, cutting wood, pitching hay, burning sagebrush, shocking oats.

But keeping the fences up was one of the most important jobs of them all. We had some fine cattle on that ranch--- some valuable horses. And, then, we didn't want the neighbors' stock to break into the fenced fields of ripening oats and blossoming alfalfa.

We used to get up early in the morning and load the wagon with fence posts, spools of barbwire, and tools. And then we would drive along the line and see that the fences were still tight. I soon learned that you couldn't trust a fence for ever.

I would test the tightness of the wires. I would push against a post and often, to my surprise, would find that one that looked sound would break right off. Dry rot--- hard winters--- and bugs and worms had done for it. The destructive forces that keep men constantly on the alert, all over the world, were at work in thse humble fence posts.

And, since then, I have found similar destructive powers at work on some of the most vital and valuable things we have.

Man boils with indignation over evils. He works for needed reforms in his laws and his ways of living. And after a fight, he usually gets

what he goes after. Then he sits back and forgets all about it. And it's then that the powers against reform--- the silent, cunning, tireless forces working against the best interest of the masses of people---get busy.

It's hard to keep the fences up sometimes. But it has to be done. . . . .

You take the pure food law. I talk about that law because it is my job to help enforce it. I have been at this job for more than 23 years--- ever since the Federal food and drugs act was passed.

And the other day I was talking to a man who has been actively interested in pure-food-and-drug legislation for 25 years. He is now chief of one of the Federal Food and Drug Administration's most important field stations. He has come up from the ranks until now he is one of the most influential of the Administration's field men. He knows the food and drug laws from the ground up. And he knows just what an enforcement agency is up against in enforcing them.

Well, this man told me about some of the conditions that led, in 1906, to the passage of the Federal food and drugs act. Those conditions are not pleasant to talk about. They were, in fact, so disgustingly unpleasant--- so preposterously crooked and dishonest--- so offensive to people of intelligence and discrimination--- that those people rose up and forced through the legislative mill a law that became a model for the world and that forced thousands of food and drug manufacturers and dealers out of the junk business and either into commercial oblivion or legal commercial practices. That law was the Federal food and drugs act. . . . .

In the early years, the enforcement of that law was sensational and exciting. It had to be. The enforcing officers were dealing with a hard-boiled crew, a crew that had had its own way for so long that it knew no other way. "The government is ruining our business!" howled that crew. The government was ruining their business when that business involved the sale of dead horse as canned beef--- and the manufacture and sale of candy containing poisonous dyes--- and the manufacture and sale of flavoring extracts that were nothing but colored water or alcohol--- and the sale of watered, impure milk--- and the sale of so-called honey that was nothing but glucose sirup with a couple of dead bees added--- and the manufacture and sale of patent medicines that were not only worthless, but downright dangerous. The government went after the witch-doctors in the patent-medicine trade on the perfectly scientific assumption that colored water could not cure blindness--- could not cure anything. The government went after the corn-doctors, indoors and outdoors, who were defrauding the public and actually endangering the public's health every day in the year. The government, taking the courts' decisions that the pure food laws were clear and concise, went after all the shysters and dubious characters who operated illegally and without conscience after the law was passed.

The scene shifts. The horse-cart days have passed. We live in a 16-cylinder, 250-horse-power, 120-miles-per-hour age. Most of us live in

cities, small and large. Unlike the squirrel, we store little food for the winter. We buy it at the store and the can opened is boss of the kitchen.

But the food and drugs act is still on the books--- although a good many people have forgotten all about it.

It's still on the books, just the same, and, for more than 23 years, the officials enforcing it--- a mere handful--- have gone on in their quiet way cleaning up the Nation's food and drug supply.

Have they had any cooperation from the manufacturers? Listen---

I quote from an editorial in a recent number of one of the most important journals of the whole canned-foods trade. The editorial is commenting upon the Food and Drug Administration's READ-THAT-LABEL campaign. It says---

> This campaign "means that the canners must dress their labels to meet the new intelligence. Canned food labels must come out of their obscurity, and must become plain messengers of the truth and the whole truth of the foods hidden under them. . . . Step out of your job as a canner and walk around to the front of the counter, as a prospective buyer of your goods, but with no definite knowledge whatever of them, and with a tinge of the usual distrust about them. Does the label on the can--- your goods handed to you as an inexperienced buyer--- answer so that you can take the can without hesitation, and know what you are getting?"

Does that sound as though the canned-foods business wants to keep the fences up? This business has learned--- to its vast profit--- that the food and drugs act has saved it from ruinous competition with the dishonest crew that operated two decades ago. And this business has learned that 23 years' active enforcement of the pure food law has so amazingly raised the standards of quality and wholesomeness of canned foods manufactured and sold in the United States that <u>today</u> the buyer goes to the store with almost complete confidence. The sales prove that. The sales tell that story. . . .

That editorial is but one of many signs that business as a whole believes the Federal food and drugs act to be a good law.

The law, then, has been effective. Since its enactment, the Government has taken more than 17 thousand legal actions against violations and violators. But it is not a perfect law. It is one post in the country's legislative fence that needs a thick coating of strong preservative against the forces that are constantly attacking it. The handful of officials enforcing the law are energetic and sincere. They are well trained for their work. But there are not nearly enough of them. I happen to know, because I am one of them myself.

I believe that after the public builds a fence of good laws, that public is often inclined to sit back and let the fence take care of itself. We could not have done that on the ranch where I lived. I do not know what would have happened to the crops and the year's profits if we had. Many people think that Congress gives us a law and that, then, it will enforce itself. I know that a lot of people think that the Federal food and drugs act will do just that.

The food and drugs act will not enforce itself. And, if the public has forgotten it, certain political and commercial interests certainly have not. These interests are constantly lobbying, constantly bringing pressure to bear upon our lawmakers, in their attempts to weaken the pure food law or to do away with it altogether.

Has this ever occurred to you? On an appropriation that amounts to less than one cent per capita per year, your Federal Food and Drug Administration is expected to make sure that all the food and drugs we use are pure and unadulterated, clean, honestly made, and honestly labeled or represented.

If you are under 35 years old, you probably won't know what a fight it took to achieve the present-day protection of the American public's pantry and medicine cabinet.

If you are well over 40, you will know. And if you are wise in the somewhat cynical ways of the world--- no matter what your age is--- you will know that no law can be neglected and still be expected to be effective. In a Democracy, the value and effectiveness of any law depends on the support it gets from the public. After all, the public makes the law.

And so it's up to the public. Are you going to support the pure food laws? Do you believe they are sound and wise? The Federal Food and Drug Administration, Washington, D. C., is always ready to send you free printed matter explaining what these laws are and just how they can help you. . . .

---ooOoo---

ANNOUNCEMENT: You have just heard the Veteran Inspector, a representative of the U. S. Department of Agriculture at Station _____. Each Monday, he tells you the many ways in which Uncle Sam is at your service. He will be with us again next Monday with a talk broadcast through the cooperation of the Department of Agriculture with this Station.

UNITED STATES DEPARTMENT OF AGRICULTURE
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UNCLE SAM AT YOUR SERVICE Monday, January 26, 1931.

NOT FOR PUBLICATION

SPEAKING TIME 10 minutes

ANNOUNCEMENT: Again Station____brings to you the words of a Veteran Inspector who has spent more than 23 years helping to enforce the Federal food and drugs act. He is a radio representative of the United States Department of Agriculture at this station and for more than a year has been giving his regular Monday series of UNCLE SAM AT YOUR SERVICE talks. His subject today is "health foods." I think that you will find the Veteran Inspector a friend of common sense diet. And now I again introduce the Inspector -----

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Away back in 1584--- which is beyond the memory of most of you--- a doctor of medicine, one Thomas Cogan, wrote a book called "Haven of Health."

It is a very hard book to get today, but I happen to have a quotation from it which may amuse you. Before I read it, however, let me emphasize that I take no responsibility for anything Dr. Cogan said about diet in 1584.

Said Dr. Cogan:

"Every offense in diet is wont to be more grievous on a slender diet, than a full diet, and for the same cause, a very spare, precise and exquisite diet is not so sure for them which be in ill health, because the breaking thereof is the more grievous. . . . When to eat is best told by hunger; hunger riseth by contractions of the veins, proceeding from the mouth to the stomach, for want of meat, for as Leonard Fuchsus teacheth, 'True hunger arises from the feeling of want when the veins do draw from the stomach as if they milk it.'"

I don't believe that our medical men would approve of Dr. Cogan's analysis of the causes of hunger, in the light of their present-day scientific knowledge. Nor am I so sure that many food faddists would agree with his ideas on how to reach the haven of health. However, I do know that we have with us today many so-called food faddists whose ideas are equally laughable, if not preposterous.

Take our so-called health foods, for example, For thousands of years, men with an axe to grind have been appealing to their fellows' health consciousness, to their vanity, to their natural desire to be well and prosperous. A common principle of certain types of advertising is to give the reader a stiff scare, and then to reassure him. When I knew less about the ways of the world than I do today, I got a few of those stiff scares myself. This principle is often used in food and drug advertisements. Take so-called health foods as an illustration: "Eat and be well"--- "Eat your way to health"--- "Eat to reduce"--- these are slogans which you see almost every day in newspapers and magazines.

In 23 years as a Federal food and drug inspector, I have seen the rise and fall of many an amateur and professional Food Prophet. There was the case, for example, of a certain doctor, with a name strangely reminiscent of Christmas, who manufactured reducing crackers. On the carton in which his crackers were packed, the doctor had printed these thoughts---

WHY NOT REDUCE WITH FOOD? WE ARE MADE OF FOOD AND FOOD WILL EITHER BUILD OR REDUCE WEIGHT. DR. BLANK'S REDUCING CRACKERS ARE REDUCING. SAFE FOR ANY ONE. THEY NOT ONLY REDUCE WEIGHT, BUT ALSO BUILD UP THE GENERAL CONDITION OF BEAUTY AND HEALTH. 'SOME FOODS WILL BUILD FAT. OTHERS WILL REDUCE IT.' TWO POUNDS A WEEK IS SAFE TO REDUCE. THIS CRACKER IS A NON-FAT BUILDING FOOD. TWO CRACKERS WITH EVERY MEAL. SEE HOW MUCH THINNER YOU FEEL IN A WEEK.

A lot of manufacturers of so-called health foods have been required by the enforcement of the food and drug law to abandon false and fraudulent claims for their products, but there are still plenty of other Food Prophets left. Sick people are credulous. They worry. They are often willing to try anything once---sometimes many times. And so the Food Prophets step in with Bear-Oil advertising --- with extravagant claims for products which are usually HARMLESS and oftener rather USELESS. Some of these products have real food value and if the makers would be content to advertise, label, and sell them for what they REALLY ARE, we inspectors would have less to do. But listen to the claims of a certain California company which manufactured a food named with 7 letters of the alphabet---

THIS SUPER FOOD IS THE CONCENTRATED VITAL ESSENCE OF FIGS, RAISINS, PRUNES, WALNUTS, BARLEY, WHEAT, AND CELERY. THREE CUPS A DAY KEEPS OLD AGE AWAY. THIS FOOD IS NOT A MEDICINE. IT IS A WONDERFULLY BALANCED FOOD, SUPPLYING NATURE'S ESSENTIAL REQUIREMENTS ENABLING THE BODY TO TAKE CARE OF ITSELF. HAS PROVEN A BOON TO MANY SUFFERERS FROM NERVOUSNESS, SLEEPLESSNESS, HARDENING OF THE ARTERIES, RHEUMATISM, BRIGHT'S DISEASE, APOPLEXY, PREMATURE OLD AGE, AND MANY OTHER AILMENTS.

Now, Federal food and drug officials take the stand that the use of the word HEALTH in connection with foods constitutes a misbranding under the food and drugs act. The use of the word implies that these products have health-giving or curative properties, when, in general, they merely possess some of the nutritive qualities to be expected in any wholesome

food product. And, while the officials know that the figs, raisins, wheat, celery, and so on, used in the making of this so-called HEALTH FOOD we are talking about, have definite food value, they still believe that the manufacturer was making false and fraudulent claims for his preparation. The manufacturer was required to make his label and his claims comply with the law.

From the HEALTH CLAIMS made for many simple, every-day foods, you'd think that they were manna from the skies, ambrosia from Mt. Olympus, the fruit of youth and boundless health and life eternal. You'd think that, I mean, if you read some of these claims without your tongue in your cheek. I could go on telling case after case that has come within my experience as a food and drug inspector. I well remember a case that involved a little brown cracker made of wheat bran and flour, salt, some yeast and lightly baked. FLOUR, SALT, AND YEAST. But the manufacturers---- a Pennsylvania concern---- announced on the label that it was FOR CONSTIPATION, INDIGESTION, DYSPEPSIA, AND SOUR STOMACH. That it was IN ITSELF A CORRECTOR OF STOMACH TROUBLES, and so on. They printed atestimonial from a man who claimedto have had dyspepsia for 30 long years but, after taking these health crackers with his meals, found PERFECT RELIEF. But why wheat bran and flour, salt, and yeast, baked in a cracker, should have any particular health and curative powers not inherent in these foods naturally, the manufacturers failed to prove satisfactorily. Shipments of the crackers were seized by UnitedStates attorneys and destroyed. The preparation was clearly mislabeled under the pure foods law.

Many so-called HEALTH FOODS have flooded the American market in past years. Of these, there are 3 main classes. The first includes whole wheat, rye, oats, bran, and mixtures of these. Now all these grains are valuable in the diet. But when they are claimed to have CURATIVE PROPERTIES and when the maker says they supply LIFE-GIVING VITAMINS IN THEIR TASTY NATURAL STATE, the Food and Drug Administration believes the claims are too inclusive and that they are deceiving the public. Such claims sound impressive, but they aren't true. Waters, mineral or mineral imitated, make up a second class. Promoters who try to convince the buyer that by their use in the home miraculous cures can be accomplished, are also operating in violation of the Pure Food Law. The third general group of so-called LIFE-GIVING products includes cand containing calcium, salt containing iodine, food materials with phosphates added, bread containing carrot flour, crackers containing senna, which is a laxative drug, and chewing gum containing PHENOLPHTHALEIN, which is a coal-tar cathartic. We are now hearing about IRRADIATED FOODS which, it is claimed supply the anti-rachitic VITAMIN D to the diet. It is the purpose of theFood and Drug Administration to insure not only truthful labeling of all these products, but also their purity and their freedom from contamination of every sort. The label claims on many of these products lead thebuyer to believe that his ordinary diet is sorely lacking in such vital substances as vitamins and minerals and that these so-called HEALTH FOODS are absolutely necessary to conserve life and health. In the enforcement of theFood and Drugs Act, it is necessary to warn manufacturers of such products that they should have their labels conform to the facts of medical science and actual laboratory tests. Food officials don't object to calling these products WHOLESOME--- provided they are wholesome. But the effort to give the impression that we all need something added to our everyday diet if we are to avoid nutritional disaster in a misrepresentation which those enforcing the food law aim to figh

SO-CALLED HEALTH-GIVING BISCUITS, FOODS, AND WATERS ARE NOT ONLY A WASTE OF MONEY IF BOUGHT FOR THEIR CURE ALL POWERS, BUT THEY ARE RESPONSIBLE FOR A MORE SERIOUS LOSS BECAUSE THEIR USE IS RELIED ON AS A SUBSTITUTE FOR NEEDED CORRECTIVE MEASURES, SUCH AS PROPER DIET, EXERCISE, REST AND SUNSHINE.

That's the stand the Federal pure foods men take. And I wish you would all send for a copy of the announcement called BEWARE OF SO-CALLED HEALTH FOODS, issued by the Food and Drug Administration at Washington.

--ooOoo--

ANNOUNCEMENT: You have just heard theVeteran Inspector, a radio representative of the U. S. Department of Agriculture at Station _____, tell about food fads and faddists. You are invited to write him, in care of this Station, if you want a copy of that Government announcement called BEWARE OF SO-CALLED HEALTH FOODS. Or, a letter addressed to the U. S. Department of Agriculture, Washington, D. C., asking for the announcement by name, will bring it to you.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

RECEIVED JAN 2 1931

UNCLE SAM AT YOUR SERVICE — Monday, February 2, 1931.

NOT FOR PUBLICATION

Speaking Time: 11 Minutes.

ANNOUNCEMENT: The Veteran Inspector comes to you today for the 72nd time to tell you how Uncle Sam safeguards your foods and drugs and to urge you again to read labels on food and drug products in order to buy economically and with discrimination. The Inspector is a representative of the United States Department of Agriculture at Station_____, and broadcasts each Monday his UNCLE SAM AT YOUR SERVICE talk. He is going to talk about bacteria today and tell you about the unceasing fight the scientists of the Federal Food and Drug Administration are waging against harmful bacteria. He is also going to give you a few practical pointers on how to take care of unused food in your own homes. Again we introduce the inspector---

--ooOoo--

Today I want to tell you about the microbe racket.

Microbes, you know, are tiny, living organisms, so small that you can't see them without the use of a microscope. Some of them apparently are so small that you can't see them with the microscope, because there are a few which even our best microscope experts have never been able to discover. Microbes or bacteria, like people, may be divided into three groups. There are the dangerous gangster types that prey upon other organisms and upon man. Then there are the microbes which just go through life, in so far as man is concerned, in a rather indifferent way, doing neither good nor evil. And last, we have the bacteria which are definitely beneficial to mankind.

We in the Federal Food and Drug Administration--- in our job of enforcing the natural pure food laws--- are mainly concerned with the tiny invisible gangsters, many of which can do as much harm as a bullet.

I was reading the other day about a case in which a family in a certain eastern city lost, mysteriously, one member by death. Three members of the family became suddenly ill. It looked like a case of food poisoning, and when the health department of the city, cooperating with representatives of the Food and Drug Administration, studied the case history they found that it was actually food poisoning that did the damage.

I won't give you the full story yet because, as is so often the case in such instances of death from food poisoning, the real causes for the poisoning are very difficult to discover and sometimes they are not discovered until days after the damage is done. But it seems that a can of evaporated milk--- a food which, when properly put up is absolutely

wholesome---was to blame. It seems that this family had opened a can of the milk and, leaving part of the milk in the can, had put the can in the cupboard in a heated kitchen. After the investigators had studied every other possible cause for this sad affair, they came to the conclusion that the evaporated milk was guilty.

Now, why was it guilty? Naturally, the inspectors took unopened cans of milk from the same lot and analyzed the milk very carefully. They discovered that it was a strictly wholesome product, that it could not possibly have caused even illness, let alone death, in its natural state. But, without wanting to be harsh with the family, I am forced to the conclusion that they were very careless. It is quite possible that harmful bacteria could get into this opened can of milk left on the shelves in a heated room.

About three weeks ago, I was talking to one of Uncle Sam's bacteriologists who was then actually engaged in studying this case. He told me that he had isolated from the milk, which had caused the death and illness in this family, a bacterium definitely known to cause acute food poisoning. He said that these bacteria were very similar to the microbe associated with hog cholera, one of the most serious of all livestock diseases. I asked him if these bacteria could possibly have been in the milk before it was opened. He said certainly not--- he had checked up milk from the same lot and found it pure and wholesome. I asked him then, how the bacteria had gotten into the milk. He said that since the milk was carelessly cared for, it was quite possible that it might have been contaminated by rats or mice or other animals, by contaminated food, or by other causes. "If they had milk left in the can," he said, "they certainly should have put it under refrigeration. A person with any knowledge whatever of disease and hygiene would have done just that."

"But isn't it true," I asked, "that food left in an open can will become contaminated through the can itself?"

He said that people used to believe that the tin of the can--- through some reaction of the food acids upon it--- might release into the food in the open can certain poisons harmful to man. Now, tin is relatively non-poisonous. But it is not a good thing to take much metal into the system. And, even though the chances of food in an open can absorbing metals are slight, it is best to remove the food from an opened can and put it into a non-metallic container. For one thing, the contact of certain foods with the metal of the can is apt to produce off flavors.

"Tell your listeners," he said, "that if they do not take care of food in open cans properly, there is always a chance of their becoming contaminated with dangerous bacteria. I believe that every housewife should know that it is necessary to keep perishable food under refrigeration when it is not actually being used. The icebox," he said, "has done a great deal to raise the standards of health and to increase the life span of mankind."

This scientist told me of a case where the metal of the vessel may actually contaminate a food. "I remember a particular instance," he

said, "A group of sailors, landing at a port in Panama, went out to the little town on the beach and bought up some galvanized buckets. They immediately got busy and mixed up some lemonade in these galvanized buckets--drank the lemonade--- and shortly afterward were very sick seamen. It is believed by some that the acid in the fruit reacted upon certain metals in the buckets and released chemical substances which are not at all good for the health. So, if you are going to make lemonade or other fruit juices, do not make them in galvanized buckets or vessels and do not keep them in such containers."

Before I started to give you these hints to housewives, I was trying to divide bacteria into three groups. I told you that we have the harmful types, the more or less neutral group, and the beneficial classes. You probably know that pickles, sauerkraut, and some varieties of cheese are produced through fermentation by bacteria. Bacteria of these types cannot by the wildest imagining be considered harmful. The second, or neutral type of microbes, play no part whatever in food production, food poisoning or spoilage. But in the third group we have organisms which are decidedly harmful or destructive. Here we include germs which cause poisoning and disease and those which rot or sour our food, making it unfit for use.

I am not going to say much about the harmless and neutral bacteria today. I won't even have time to say very much about the virulent microbes.

Almost every variety of food can be purchased nowadays in cans or jars. Furthermore, the vast proportion of this food is wholesome and tasty. The days when we used to open a can of food with some suspicion have passed and one of the big reasons why our canned goods are harmless and wholesome today is that most of these foods are sterilized by heat. I mean by sterilizing that all the bacteria in the raw product are killed by the canning process. But if the cooking process is inadequate or if the microbes present are unusually resistant to heat--- as some are--- a few bacteria will survive and grow in the sealed cans and cause spoilage. Now, the very existence of the canning industry depends upon the keeping quality of its output, and so we ordinarily find that canned foods contain no living bacteria. But, in spite of the very strict requirements of the pure food laws that all canned foods shall be correctly processed and entirely harmless to the consumer, we occasionally find canned goods that have been inadequately processed and which contain bacteria causing the food to decompose. It is the duty of the Food and Drug Administration to find such lots when they are shipped in interstate commerce and it is the function of the bacteriologist to determine the presence of the living bacteria and the decomposition of the food.

Now, is there any way the buyer can tell when an unopened can contains food that is partly or wholly spoiled and that contains living bacteria? In a general way, there is. When bacteria causing decomposition of food are active in sealed containers, the cans swell up on the ends. You should never eat food from swollen cans. In canned foods, we also have what is familiarly known as <u>flat-sours</u>. Flat-sours are found in products which are normally neutral to the taste and are evidenced by a

sour taste or odor, with no swelling of the container. This sad condition is caused by different types of bacteria which are not easily killed by heating. The Food and Drug Administration classes flat-sour canned foods as decomposed and the pure food laws prohibit their sale. But if you happen to get a can of such food, you will probably be able to detect the decomposition by the appearance or the odor of the food contained in the can. Remember--- a sour taste or odor with no swelling of the container.

I am talking against time, but I am going to wind up with a few more practical pointers---

If food is to be eaten RAW, SEE THAT IT IS FRESH, CLEAN, AND FREE FROM ABNORMAL ODORS, ROTTING AREAS AND FROM MOLD. ALWAYS WASH IT IN CLEAN WATER. HEAT COOKED FOOD TO THE BOILING POINT AND KEEP IT FREE FROM CONTAMINATION. KEEP IT IN THE REFRIGERATOR IF YOU WANT TO HOLD IT FOR MORE THAN A FEW HOURS.

NEVER USE CANNED FOODS THAT SHOW ANY EVIDENCE OF SPOILAGE. SUCH SPOILAGE IS EVIDENCED IN BAD ODORS, GAS FORMATION, CLOUDINESS OF LIQUID, OR SIMILAR SIGNS. SWELLING OF THE TOP OF THE CAN IS A DANGEROUS SIGN. NEVER USE FOODS FROM CANS THAT SHOW SPRINGING, FLIPPING OR SWOLLEN LIDS. THROW AWAY WITHOUT TASTING, FOOD FROM GLASS JARS SHOWING LEAKS AROUND THE RUBBER RINGS, CLOUDINESS OF THE LIQUID, OR SPURTING OF THE CONTENTS WHEN OPENED. NEVER TASTE PRESERVED FOODS THAT LOOK SUSPICIOUS UNLESS YOU FIRST BOIL THESE FOODS FROM TWENTY TO THIRTY MINUTES. IF YOU ARE DOUBTFUL ABOUT ANY FOOD, THROW IT AWAY.

In all fairness, I want to say that our commercial and domestic canned and bottled food supply is unusually wholesome and free from hazards to the health. If they are properly put up, this is equally true of our home-canned or home-bottled fruit. Nevertheless, since there is always some chance of spoilage, it is wise to observe the precautions I have given you.

If you want more information on avoiding any possible danger to the health from eating spoiled foods, send for a copy of a circular, "FOOD POISONING AND THE LAW.

--oooOooo--

ANNOUNCEMENT: That concludes the Veteran Inspector's service talk for this week. He will be with us again next Monday. Meanwhile, address your requests for "FOOD POISONING AND THE LAW" to the Veteran Inspector in care of Station_____.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

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U. S. Department of Agriculture

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UNCLE SAM AT YOUR SERVICE Monday, February 9, 1931.

NOT FOR PUBLICATION

SPEAKING TIME: 10 Minutes.

ANNOUNCEMENT: This is the day and hour when your friend, the Veteran Inspector, representative of the U. S. Department of Agriculture at Station_____, comes to you with his regular Monday UNCLE SAM AT YOUR SERVICE talk. For more than 70 weeks, he has been telling you how the Federal Food and Drug Administration, through its enforcement of the national food and drugs act, safeguards your foods and drugs and encourages you to read labels on such products so as to buy with discrimination and good judgment. He is going to talk about so-called influenza and grippe "cures" today. I think he will have something that will surprise you. At any rate, here is the Inspector, and now it's his turn to speak ---

---oOo---

Illness has a tendency to make people snap at promises of cure.

A man who is sick finds his efficiency and his joy in life seriously depleted. Things being what they are in a somewhat cruel and cynical world, a man or woman needs all the efficiency and good health possible to succeed and to fulfill his or her responsibilities of life.

And, unfortunately, in the past we have found plenty of quacks and dubious characters who have been perfectly willing to impose on the optimism, if not the gullibility, of people. I take it that some of these imposers have really believed that they were doing a great service for mankind. Take one example from the early history of the enforcement of the Federal food and drugs act. A certain bearded bear-oil merchant was mixing up in tubs a concoction of alcohol and oil. He bottled the stuff and travelled around the country selling it to the citizens in the various towns and villages. He advertised it as having curative value --- "guaranteed or your money back" --- for all sorts of diseases from blindness, to rheumatism, to common colds, and when your Federal drug agents brought him to court to answer for his misdemeanors, they were actually surprised to find that many buyers of this preparation were perfectly willing to appear in court as witnesses to the miraculous powers of this very simple mixture. One man, in fact, appeared in court and testified that, by drinking this stuff, he had magically been cured of blindness. Someone apparently had been deceiving him, because his friends had to lead him into court. His blindness was not cured and it is still a mystery to me just what kind of reasoning the gentleman used in his testimony.

I am going to tell you about so-called influenza cures in a very short time. But first I want to tell you another story that has greatly

interested me. One day, years ago --- according to popular legend --- the President, or Emperor, or King of Haiti was walking down the grand staircase of the palace in the island's capital city. He was dressed in his finest official style and was accompanied by dignified members of his staff, also dressed in fine white linens with plenty of gold and scarlet braid.

And just then the President, or the Emperor, or the King of Haiti happened to look down to the marble step just below him and there, lying on the white, smooth stone, were two common ordinary matches, crossed and tied in the middle with a piece of red cotton thread. Black Magic, thought the Emperor or President of Haiti ---

And the ruler of the Negro Republic turned pale --- turned around -- and made all possible speed back to his apartment --- and didn't come out again for many days.

Most of us would smile at the story --- some, perhaps, would not. At any rate, the ruler of Haiti's instinctive reaction to a superstition was certainly not peculiar to that one individual. Most of us believe in a certain kind of magic --- few of us are entirely devoid of superstition of one kind or another.

Now let's get back to influenza and see if we can apply the two stories I have just told to some of the facts I am going to give you now.

The consensus of present day RELIABLE medical opinion is that NO COMPETENT DRUG TREATMENT EXISTS FOR INFLUENZA OR GRIPPE.

Those of you who are old enough to remember the World War, doubtless remember that, at the time, we had quite a war in this country with the disease known as influenza. The disease, like a terrible army, swept over the United States and through the trenches in Europe, leaving a good many dead in its wake. The terrified people --- knowing little of the cause, of the nature and the remedy for flu --- looked for any possible help. We closed the schools, the churches, the dance halls - we wore muslin masks over our mouths and noses - we avoided crowds - we were a badly frightened people. After a few months, the epidemic passed over --- leaving its quota of the dead.

Many ALLEGED cures for flu were advertised in those days. Meanwhile the doctors and the scientists went into their hospitals and their laboratories and began the long search for the thing that caused this treacherous malady, but to this day --- according to most reputable doctors and scientists --- the cause of influenza has not been determined with finality.

Again, in the winter of 1928-29, we had an epidemic of influenza, not so severe as the great war flare-up. Epidemics, like history, repeat themselves. Anyhow, in the winter of 1928-29 --- with influenza again threatening the people --- we read everywhere, in newspapers, magazines, on billboards and streetcar cards, and we heard broadcast, the curative claims of certain preparations recommended for the flu. The people had had their big scare and seemed to be willing to try anything once. So

certain dishonest and unscrupulous manufacturers and advertisers, taking this emotion of men as a cue, laid careful plans to cash in on the national calamity. They were not all new operators in the field of patent medicine manufacture, but some of them worked out and prepared their so-called preventatives, or "cures", over night so as to be in on the easy money waiting to be collected from a badly frightened people.

Now the Federal Food and Drug Administration employs trained scientists and physicians, as well as lawyers, and inspectors like myself. Knowing the sum total of medical study and experience, so far as influenza and grippe are concerned, the Administration immediately issued an announcement to the public advising that there are no known drugs or combinations of drugs which, of themselves, will prevent or cure influenza or grippe. The Government announcement went on to say that any claims of preventive or curative effects for flu, on the labels of these preparations, would be considered to constitute a violation of the Federal food and drugs act and would be dealt with accordingly. The Administration backed up this announcement with hard work and put every available inspector in the field with instructions to take samples of every preparation labeled for flu or grippe, for laboratory analysis by Federal scientists. This was a big job, for, in the Eastern District of the United States alone, scores of different preparations which were either advertised or labeled for grippe or flu were found. 395 preparations were found to be fraudulent and shipments of them were seized. The Government naturally considered the sale of these fraudulently labeled products as a great cheat on the public and actionable under the food and drugs act.

As a Federal inspector, I was in on that clean-up myself. And I am very frank to tell you that we inspectors are not instructed to look with suspicion on drugs and preparations that have KNOWN value, that MAKE HONEST CLAIMS FOR SOMETHING THEY CAN REALLY DO. But in the campaign I am telling you about, the plan was to seize without warning preparations so OBVIOUSLY AND DANGEROUSLY MISBRANDED as to leave no room for argument as to their worthlessness. Under that law, a product is considered subject to seizure when it is labeled, on bottle, box, or carton, as being a COMPETENT TREATMENT for grippe, influenza or pneumonia. And right there is your guide as a buyer. If you find any drug or medicine labeled and guaranteed as a competent cure for influenza, grippe or pneumonia, you can be pretty sure that the preparation is fraudulently misbranded. The Administration takes the stand that a manufacturer has no right to stimulate the hope and the trust of the public in a preparation which has no curative value for influenza, grippe, or other disease mentioned on the label. It would take a very good mathematician to figure out just how much the public was saved in dollars and cents by those seizures. But it would not be hard to tell you in just what ways honest and reputable drug manufacturers were protected by removing from the channels of trade false and fraudulent preparations which were competing on the market with honest products honestly labeled.

You may see advertised today certain preparations labeled as having curative powers for these three serious diseases. Mislabeling is not the only type of deceit practiced in connection with the sale of so-called cures and preventives of flu, grippe, and pneumonia. Another rather common type of deceit is the false advertising in newspapers and

magazines. You will often find the labels of medical or drug preparations to be in complete compliance with the law. These labels may make no claim to curative or preventive value that could not reasonably be expected of the preparations they advertise, but the newspaper and magazine advertisements of the same preparations are often something else again. You may find a preparation, whose bottle or package label is as modest as a small white daisy in a meadow, advertising itself in sky-sign letters in the magazines and newspapers. Some of these ads are spread over whole pages in newspapers, magazines, trade journals --- spoken of before the microphone --- and they are often just about as modest as a gangster's diamond ring. Many of these advertisements don't hesitate to declare without qualification that the products in question can positively cure flue, grippe, pneumonia, and nearly everything else mentioned in medical books. As the Federal food and drugs act now stands, this outside newspaper, billboard, magazine, or radio advertising cannot be reached by any provision of that law, but the Food and Drug Administration can reach --- and does reach --- manufacturers who label, on the bottle or package, or on circulars accompanying the bottle or package, their preparation in a false, misleading or fraudulent way.

And just to show you that a great many people are in sympathy with the Government drugs officials in their fight to clear the market of medical frauds and cheats, I will close by quoting from a letter which an Eastern publisher wrote to a responsible official of the Food and Drug Administration. He says: "We had cleaned out our columns of questionable medical advertisements many years previous, but we are continually turning down business. Proprietary medicine manufacturers have been notified about our stand." Many of the ethical publishers have taken a similar stand.

---oOo---

ANNOUNCEMENT: You have just heard the Government's Veteran Inspector, who tells you each Monday how the U. S. Department of Agriculture protects the public against impure, adulterated, misbranded or dishonestly sold foods and drugs. He is the representative of the Federal Food and Drug Administration at Station_____, and will continue his series next Monday. You are all invited to hear him.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

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UNCLE SAM AT YOUR SERVICE

RELEASE: Monday, Feb.16,1931

NOT FOR PUBLICATION

SPEAKING TIME: 10 1/2 minutes.

ANNOUNCEMENT: The Veteran Inspector is with us again and is going to tell us the story of how Government foods and drugs officials safeguard the national food and drug supply. Today, he is going to talk about imported foods and drugs. He will take us to New York---he will take us out in the field. He will speak of ships and many things from foreign ports. His talk comes as this week's UNCLE SAM AT YOUR SERVICE radio program, prepared by the U. S. Department of Agriculture and broadcast in cooperation with Station _____. Mr. Inspector---

ooOoo

My grandfather was a sailor and, although I was born far inland, I have always had a love for the waves.

He used to go to sea in an old four-master--- it was before the days of three-funneled, twin-screw ships of the great mercantile and passenger lines---and one day he came back with a parrot that talked Spanish and a little, black tropical monkey that tried to bite my finger off. We didn't see the old gentleman very often.

My other grandfather was also a wanderer. He left his native country, Scotland, when he was very young, and went out West, where even then men were said to be men. He became a rancher and at one time owned thousands of acres of dry farm wheat land. But, unlike many farmers, he always liked to get away once in a while and go to strange places. I guess the two of them gave me a kind of wanderlust that I find it impossible to satisfy. Anyhow, I can satisfy it vicariously, in a way, by working for the Federal Food and Drug Administration and visiting the different stations throughout the country, and by checking up on the many strange and exotic products that this country imports from foreign lands. You see, all imported foods and drugs come under the provisions of the national pure food laws and, as an inspector, it is part of my job to see that these products comply with the law.

Now, let's take a little trip to New York City, where one of the Food and Drug Administration's largest stations is located. The laboratory is on the twelfth floor of a huge building in lower New York. You can stand at the windows and see the noisy, towering city spread out in colored blocks and towers almost as far as your eye can reach. You will see the rivers, the great bridge--- you will see Brooklyn sprawling over the flat land across the East River. You will see the busy warehouse district, the noisy and colorful markets, the streets, and when you turn toward the harbor and catch the bluegreen color of water and sky, you will see the decks

of the ships--- the flags of a hundred foreign lands--- and you will hear the roar and the hum and the cries of the streets --- the voice of one of the greatest and busiest cities in the world.

I always like to be in New York, near the sea, where I can visit the foreign sections and look over the foods and drugs displayed in the many colorful markets. I guess I can see more foreign products in a day that way than my sailor grandfather saw in his entire life. Of course, New York is only one small corner of the huge field covered by your Government foods and drugs inspectors. The field is as wide as the nation--- really as wide as the world. I have told you before that the Administration maintains 18 field stations located at strategic points in the country. Some of the most important of them are situated in port cities, such as New York, New Orleans, San Francisco, and Boston. The reason for this is that it is the duty of the Administration to examine and analyze shipments of foods and drugs from foreign lands designed for the American table or medicine cabinet.

Take drugs, for example. I have right here on the table a report from W. R. M. Wharton, chief of the Administration's eastern district, which says that his district alone examined 3,593 shipments, covering over 250 varieties of crude drugs and aggregating over 61 million pounds, during the year ended July 31, 1930. Just the names of this long list of products make an interesting lesson in world geography. I find here cinchona bark, the source of our well-known quinine, which you may know was used by the Peruvian Indians as a specific for malaria. And here is belladonna, which comes from the plant known as the nightshade, and the valuable uses to which the drug is now put are said to have been discovered by a peasant woman in Europe. Some of the crude drugs listed here in this report you have never seen--- many of them are common. Anyhow, of the 61 million pounds examined by the eastern district during the year stated, over 5 1/2 million pounds were detained because they did not meet the standards prescribed by the food and drugs act. Some of the drugs were spurious, some moldy--- others contained excessive moisture--- some were excessively dirty or adulterated with foreign matter. You can readily see the importance of rigid inspection of all imported crude drugs when you remember that such products often swing the scale between human life and death.

We also import foods. While the United States produces a great deal of the food we Americans eat, there are plenty of foreign countries which contribute to our food supply. Take figs, for example. We now raise considerable quantities of figs in California and other southern and western states, but we import large quantities of them from Turkey and other Mediterranean countries. Sometimes we inspectors find figs wormy, moldy, or sour. During the shipping season of 1927 and 1928, Federal inspectors examined nearly 20 million pounds of imported figs as well as figs produced in this country. Those figs found to be violative of the food and drugs act weren't allowed to come into the country.

And take cocao beans, from which chocolate and cocoa are made. During a single year, Government food officials examined 1 1/3 million bags of cacao beans and found 10,000 bags wormy or moldy. These defective cacao beans likewise were denied entry into our domestic commerce.

And then there are the canned foods. We import immense, quantities of all sorts of canned foods from such countries as Italy, France, Belgium, Spain, Norway, Denmark, Switzerland, from the tropics, from the far north. All shipments of such products must pass close inspection before they are allowed to reach the American consumer. Imported food products which are unwholesome, impure, falsely labeled, although they often try to get in, rarely succeed in passing the vigilance of inspections and chemical tests applied.

Spices come to us from the four corners of the earth. Dates found on sale at American markets come largely from Mesopotamia---which is in Asia--- although we now raise dates in this country. Olive oil comes to us from Greece, Italy, Spain and other countries. There are literally hundreds of foods and food products which the American public demands daily and if we cannot raise them here, we bring them in from places where they can. But all of these imported foods and drugs--- no matter what they are--- no matter where they come from---must undergo strict examination by Federal inspectors at port cities and in the interior. And if they are found adulterated, misbranded, defective in any way under the food and drugs act, they are immediately outlawed and refused entry to the United States.

A Government inspector who has been in the business for more than 23 years naturally finds nothing startlingly new in all this. As an inspector I have visited the docks, the markets, the warehouses, the factories. I have worked in the offices on the papers and records. I have seen some interesting sights--- had some thrilling experiences. I wish you could have been with me when, some years ago, I opened a bag of beans and found inside, carefully hidden in the center of the sack, a small box of rare wood, packed full of opium. The opium was worth thousands of dollars. We turned that case over to the men who enforce the Narcotic Act. As I say, it is an old story to me, but still full of excitement. And the job makes it possible for me to stay relatively in one place, and at the same time keep up the illusion of being in many other places.

The food and drugs act is designed to safeguard the consumer's health and pocketbook. The act was passed primarily to help those of us who buy foods and drugs---but it also has been a great help to those who manufacture or ship these products. The law is rigidly enforced. We find many violations, but the number is small when you take into account the immense size of the food and drug industries and when you remember that we inspect thousands and thousands of samples yearly. I have found that a substantial part of the vast volume of food products imported into the United States and shipped from city to city is wholesome and truthfully labeled, but I leave it to you to decide how large that proportion would be if we had no food and drugs act.

Now let me close by telling you very briefly how the foreigners who ship food and drugs to us --- and produce them for us--- look at the law. I believe one quotation from a report from the New York Station will give you a general idea of the foreigners' viewpoint. An exporter of figs, from Turkey, when visiting the United States, told one of the Administration's fig experts that the best quality of figs are selected for United States delivery. He said that fig growers and shippers sent us the best of their crops, because the United States will not accept their poorer qualities.

oo000oo

ANNOUNCEMENT: You have just heard the Veteran Inspector's service talk, which this station broadcasts each Monday through the courtesy of the U. S. Department of Agriculture. He has delivered nearly 80 of these talks in the past year and a half, and is going to keep right on giving them. You can hear the next one by tuning in on Station _____ at this hour next Monday.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

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UNCLE SAM AT YOUR SERVICE

February 23, 1931

NOT FOR PUBLICATION

SPEAKING TIME: 9 Minutes

ANNOUNCEMENT: And now we are going to hear from the Veteran Inspector. If you have been listening to the many talks on safeguarding your foods and drugs which he has given, you won't need to be reminded that he is a representative of the U. S. Department of Agriculture at Station _____. Watch for his UNCLE SAM AT YOUR SERVICE, broadcast at this hour each Monday by this station. Mr. Inspector--

---ooOoo---

Last night I was reading a copy of a magazine dated July, 1913. I must be getting old, because occasionally I like to dig up these old numbers and read and re-read articles which impressed me at the time they were first written.

And so I re-read an article on safeguarding the consumer, which I remembered. There's a story there which so beautifully illustrates what I want to talk about today that I think I will tell it to you.

It seems that an old-time judge had just been sitting on a case tried before a court in some out-of-the-way town. "Bah," he said, as he swept his books and papers into his faded green bag. "There's no more liberty--- nothing but rules! And now the State Board of Health says a man mustn't spit on his own floor."

Boiling with indignation as he recalled the latest restriction of his right, as an American citizen, to do as he pleased, he stomped out of the court room. He did not even glance at the jurymen, who had spent all the morning and most of the afternoon in hearing the testimony of witnesses and the pleas of counsel in the case before the court.

The prisoner at the bar was a grocer who, so the State alleged, has violated the sanitary law by habitually making a cuspidor of the floor of his shop. The jury, however--- apparently more modern than the old judge--- did not see any particular interference with a citizen's liberty of action in the rule of the Health Board and apparently considered that the Health Board's dicision demanding decency and cleanliness in grocery stores was a wise measure.

Since then we have seen numerous regulations demanding decency and cleanliness on the part of not only grocers, but the public in general. In the old days, before the Federal food and drugs act was passed, the State did not seem to feel that it had the power to interfere with manufacturers who wilfully adulterated and misbranded food and drug products. In those early days, a policy of-- "Mind your own business and let the other fellow mind his"--- was common.

But we don't see it that way today. The national pure food laws, now

very popular, were passed as a direct result of the public's demanding more restriction rather than less. And the beauty of it is, the majority of food and drug manufacturers and vendors agree with the public that those laws are just and valuable.

Maybe you would like to hear what was being said about the pure food laws in the hectic days shortly following their passage. Again I am going to turn to my files of dusty magazines. Dusty on the surface, I mean--- but not so out-of-date inside. Here's an old copy of "World's Work" for September, 1907. Since the Federal food and drugs act was passed, in June, 1906, we should be interested in what the writer has to say in his article called "What the Food Law Saves Us From." On page 9319, he catalogues a few of what he called "food iniquities." The boys had a nice leaning toward bombastic language in those days, but what the writer, a doctor, had to say about his subject makes me believe that they really were iniquities. He stated that skins and refuse of canning factories, sometimes fermented, were often used as adulterants in catsups. The doctor considered the practice iniquitous.

Milk, he wrote, was often adulterated with water. Skimming, and both skimming and watering, were frequent, and so was coloring and preserving.

"Renovated butter is made from rancid material," the doctor wrote, "and is water-heated to remove the curd, brine and scum; then it is air-blown to drive off the bad odors, mixed with milk, 'ripened,' worked, salted and packed."

I would call that decidedly dubious practice in the manufacture of butter, and it was just such practices as those that brought the Federal food and drugs act into being on a wave of public acclaim.

I could tell you a great deal more about this article, but I want to quote a few words from another called "Pure Food Labels," which was printed in "Good Housekeeping" for February, 1909.

"The relation of the label to food products sold in the markets of our 46 States, 3 territories and insular possessions under the national food and drugs act is of the highest importance," wrote the author. Remember--- this was 1909; since then we have added two States. "Labels now mean something more than an artistic design and attractive phrasing, and it is the duty of every housewife who desires to purchase pure food to study the labels and interpret their meaning."

(If you have been listening to the read-the-label talks of W. R. M. Wharton and W. W. Vincent of the Federal Food and Drug Administration, you will have heard a similar statement many times.)

This man went on to say that before the pure food laws were enacted, manufacturers and distributors commonly mislabeled foods and drugs. "Not every label was a deception," he said, "but many of them were at least ingenious. Many articles of food that have now vanished from the market, disguised themselves under the euphemisms of 'compound' and 'extract.' These simple nouns cloaked a multitude of sins and provided fine raiment for some of the rankest of shams." This writer went on to say that beginning with October 1, 1908, honest labeling went universally into effect. I am sorry that I cannot agree with him, because we government inspectors quite frequently find dishonest labeling of foods and drugs. Part of our job, naturally, is to find and correct such abuses of the pure food laws. I can say, however, that foods and drugs are now much more honestly label-

ed and of much higher quality and wholesomeness, too, than they were when that very interesting article in "Good Housekeeping" was written.

Here's another old copy of "Good Housekeeping," this one for October, 1910. And the Editor has an interesting editorial called "Debauching the Label."

"What has happened to the Federal Pure Food Law?" he asks. "Does the label on foods no longer tell the truth and the whole truth?"

The editor goes on to say that "the reader has been educated to the fundamental importance of the label: consumers are no longer asleep--- content to accept hayseed and glue for jam, or fill their systems with powerful preservative drugs; they have learned to read the label and rely upon it, selecting reliable brands and informing themselves, as a matter of scientific interest as well as of caution, as to what they are putting into their stomachs."

That was in 1910--- but it has a very familiar ring to it. As my neighbor, who is also an old-timer, says, "The pure food laws stand between the public and a national stomach ache." They do just that, but the query, "What has happened to the Federal Pure Food Law," written in 1910, only four years after the act was actually passed, was a question which is quite universally asked in 1931.

After briefly tracing the history of the Federal food and drugs act, the editor ended with this excellent advice: Remember that the makers of imitation goods are still active. Remember that manufacturers and sellers of adulterated and misbranded foods and drugs are still active. Remember that the pure food laws need your support and, meanwhile, buy only the goods of reliable manufacturers.

My time is about gone, but I want to add just one recommendation to those of the Editor. I would say: Carefully read all labels on foods and drugs if you want to become an exacting, intelligent buyer and if you want to buy most economically and with the greatest benefits from the health standpoint.

---ooOoo---

ANNOUNCEMENT: You have just heard the Veteran Inspector's latest UNCLE SAM AT YOUR SERVICE talk, broadcast each Monday by Station _____ through the courtesy of the United States Department of Agriculture. The Veteran Inspector has been in the business of helping to enforce the national pure food laws for more than 23 years and ought to know what he's talking about. He has already given more than 70 of these talks of his and is going right on with another next Monday.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

FEB 2 1931

UNCLE SAM AT YOUR SERVICE

RELEASE: March 2, 1931

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NOT FOR PUBLICATION

SPEAKING TIME: 10-1/2 Minutes.

ANNOUNCEMENT: For a year and a half the Veteran Inspector, who speaks for the Federal Food and Drug Administration at Station _____, has been telling you how Uncle Sam safeguards our food and drug supply. He has an interesting subject today--- and that is, food standards. Probably many of you believe that food is just plain food, but it seems that it is a little bit more complex than that. Anyhow, let's see what the Inspector has to say about it. Mr. Inspector-

--ooOoo--

There are many things about people that have im ressed me, but there is one trait that has always intensely interested me. Let me see if I can tell you what it is with a story---

I have a friend who recently, in a period of protracted hard luck, was reduced to every extremity to make a living. It seemed that some evil genius camped on his trail and every time this young man seemed to be at last getting a break, the evil one knocked his hat down over his eyes. Anyhow, this young fellow finally reached such a desperate position that he was reduced to hunting mushrooms on golf courses and taking them to the restaurants and selling them. It just goes to show how practical we can be. But the funny thing about it is, in this case, that this chap writes poetry about daffodils and ladies with purple eyes and men with tulip hair, on the side.

I want to tell you another little story to illustrate this. I was down in Mexico once, standing on the street, looking into an open doorway where a group of brown-faced Mexican girls were making tortillas. A very practical job, it is--making tortillas, which the Mexicans use as we use bread. The girls were very busy, indeed, slapping the little flat cakes from hand to hand, and talking and laughing. That was their job, to make tortillas, and they were going about it in a very practical way. But suddenly an Indian flower seller stopped at the door with his great bunches of blue and white flowers, and every single last girl dropped her tortilla and went to the door and gathered around the flower seller. They didn't have any money to buy flowers, but they did stand there in a kind of rapture, admiring the blue color. Then after a while they went back to patting their tortillas again.

We're pretty funny all right. We say a spade's a spade, and then go to a show and, with our eyes popping out, watch the magician taking rabbits out of a top hat. Sometimes I think we want to believe that rabbits spring naturally from toppers and that fairies come out and dance in the woods at night. We listen to soft music and feel very rapturous, and then we go to the grocery store and give the grocer a calling down because he charged one cent too much for the butter. But I guess that's the way we ought to be. All this leads me, be detours, and over rather rough roads, to the subject for today.

Now let's see just how practical we are about some very common foods. Take bread as an illustration. I guess everybody thinks he knows what bread is, but there are hundreds of different kinds of bread, made in all shapes, of many colors, and baked from many different kinds of flour. When is bread sweet bread, or sour-dough, or dog-biscuit, or hard-tack? Is it bread when it is baked in the form of the first page of a newspaper, or when it is pulled out long and twisted like the long braid of the old-fashioned girl's hair? And when is flour, flour? And when is food pure and unadulterated? When is it adulterated, impure, or downright fraudulent?

You go to the store and ask for a jar of STRAWBERRY PRESERVES. The grocer reaches up on the shelf and hands you the jar. It has a label which reads, "STRAWBERRY PRESERVES," and giving the name of the manufacturer and the net weight of the contents. That's about all you'll find on the average strawberry-preserve label. Now when you take that jar home and open it up, what should you expect to find? You should expect to find a STANDARD STRAWBERRY PRESERVE, which means that it is made with at least 45 pounds of strawberries to each 55 pounds of sugar, and contains no added pectin concealing a substitution of water for fruit or other adulterations.

Or, if you buy a product labeled with the word MAYONNAISE, unqualified, you will get a product consisting only of oil, egg, vinegar, and seasoning. The standard requires a minimum of 50% vegetable oil and also sets a minimum for combined egg yolk and oil. The finished product should contain no starch, gums, or other fillers. When these are used, the label will not say simply MAYONNAISE, but will call your attention to these added substances, not included in the standard, and not ordinarily used by the housewife. Well, a lot of sins have been committed in the name of mayonnaise, and I have opened so-called strawberry and other fruit preserves that probably never saw the real fruit. And when the Federal food and drugs act was passed more than 23 years ago, the officials who were charged with its enforcement saw immediately that if they were to correct these violations of the pure foods law, THEY MUST KNOW WHAT PURE FOODS ARE. And so they began to set standards and definitions of foods and food products, and that's what I want to talk about today. Incidentally, the men who set these standards are not allowed to use much imagination in their studies and rulings, but must be practical, hard-headed students of the foods they consider, in order to set the precise standards by which foods are judged under the national pure foods laws.

Way back in 1897, we had a Standards Committee, which even then was working out what they considered to be the standards for different food products. In that year, the Association of Official Agricultural Chemists assigned to five of its members the job of formulating specifications for foods and food ingredients that would serve as a guide to purchasers, manufacturers, and to law-enforcement officials. This was, of course, nine years before the Federal food and drugs act was passed, but several states and cities already had laws designed to prevent traffic in adulterated and misbranded foods, and the officials hired to enforce these laws found themselves in the awkward position of not always knowing just exactly what was adulterated and misbranded. Standards in those days were not uniform, of course, nor were they uniformly accepted. Very little work had been done in the way of standardizing food. Very little had been printed on the subject. The Committee had a very hard row to hoe.

The Committee, however, went to work and kept right on working until 1913, when a new Standards Committee was created. This Committee still meets.

It is composed of representatives of the U. S. Department of Agriculture, of the Association of Official Agricultural Chemists, and of the Association of Dairy, Food and Drug Officials. The representatives of the last two organizations are all State officials, concerned with State food law enforcement work.. The Chairman of the Committee is W. S. Frisbie, of the Federal Food and Drug Administration.

So much for the brief lesson in history.

Now I am going to take you to Mr. Frisbie's office and let him tell you what his Committee is doing, and ask him to outline some of the difficulties which the Committee has to face. From now on, I am giving you the words of Mr. Frisbie:

"For one thing, cultural conditions have a lot to do with the composition of a food or food product. Tomatoes, for example, aren't exactly uniform. Tomatoes grown in a wet season will be different from those grown in a dry year. The milling quality of wheat will vary from year to year. Geography also has something to do with it. And then the processing methods in factories vary. Furthermore, the ever-changing manufacturing methods give rise to differences in quality or composition of the products manufactured.

"Then you have to consider the so-called HUMAN ELEMENT. In drawing up definitions and standards for foods and food ingredients, the Standards Committee must consider the interests of both consumer and manufacturer. The Committee--- when it defines the maximum or minimum limits for certain constituents in foodstuffs--- does so largely from the public's understanding of the meaning of the food being considered. In the eyes of food officials, each product must contain no less of the desirable constituent and no more of the undesirable ones than called for by the official definition or standard. The whole business is far from a 2-and-2-equal-4 proposition.

"One thing the Standards Committee does is to set percentage LIMITS for the constituents of certain foodstuffs. For example, chocolate must contain not less than 50% of cocoa butter, the natural fat of the cocoa bean. But, as a matter of fact, most foods sold in the United States today are ABOVE the minimum requirements of the official standards. It is not at all unusual for spices to contain much less foreign matter, such as stems, chaff, and so on, than the standard limits. And most of the flour on the domestic market contains less than the 15 per cent of moisture and the 1 per cent of ash allowed in the definition. Legal cream may contain as low as 18 per cent of milk fat, but cream may be bought which contains 40 per cent of milk fat.

"Year after year, the Standards Committee continues its work. It makes any necessary or desirable changes and holds a public hearing if the subject is very important. It finally submits the standard to the Secretary of Agriculture. If the Secretary disapproves it, he sends it back for further consideration by the Committee. If he approves it, the new standard is at once issued as a publication of the U. S. Department of Agriculture. The standard then becomes a part of the nation-wide system of control that has gone far in bringing the American food supply to its present high standard of purity."

Thank you, Mr. Frisbie.

I won't have time today to tell you the standards for specific foods and food products. But you'll find many of them in a Department of Agriculture publication which will be sent you free for the asking. Ask for a copy of F. D. Number 2, called DEFINITIONS AND STANDARDS FOR FOODS AND FOOD PRODUCTS.

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ANNOUNCEMENT: And that concludes the Veteran Inspector's talk for today. Next Monday, he will bring you another story of how Uncle Sam deals with foods and drugs. Meanwhile, write him in care of Station _____ if you want a free copy of F. D. No. 2, on definitions and standards for foods and food products, and other printed matter dealing with the subject.

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UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION
MAR 3 1931
U.S. Department of Agriculture

UNCLE SAM AT YOUR SERVICE — Monday, March 9, 1931

NOT FOR PUBLICATION

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Speaking Time: 10 Minutes

ANNOUNCEMENT: And now we are going to hear from our friend, the Veteran Inspector, who, for 80 weeks, has been telling us why we should read labels on foods and drugs in order to buy with intelligence, discrimination, and economy. He has another argument to advance today in his UNCLE SAM AT YOUR SERVICE talk, broadcast by Station_____, through the courtesy of the United States Department of Agriculture. Mr. Inspector---

---oOo---

What is the difference between a standard and a substandard canned food?

Is there a difference in quality, in wholesomeness, in edibility?

Let's see what your Federal foods officials think about it--- In the light of a new amendment to the Federal food and drugs act---

Let's go back 30 years and then work up to the present.

Three decades ago--- before the Federal food and drugs act was passed--- when the housewife put on her bonnet and went to the general store for a can of tomatoes, she was entering into a deal that had some of the aspects of the old shell game.

She asked for what she wanted and put down her money in good faith. Maybe she got what she wanted--- but the chances are equally good that she did not.

The lady in the poke bonnet paid for a can of tomatoes, but she may actually have received a can of inferior tomatoes adulterated with water. Sometimes, to her dismay, she didn't even get tomatoes.

And the same thing held good when it came to dozens of other canned foods. Buying any kind of canned foods 30 years ago had some of the aspects of high adventure. But in the 24 years since the national pure food laws were passed, there has been an amazing improvement in the quality and honesty of labeling of canned foods on the American market. And the public--- long suffering, but highly appreciative of good turn--- has fallen to and shown its appreciation of this improvement in quality by increasing the sales of ethical cannedfoods manufacturers. The pure food laws, then, have been a two-way proposition when it comes to benefits: They have protected the buyer, the consumer--- and they have proved highly profitable to manufacturers who have observed them in spirit and in letter. The pure food laws, of course,

specify that canned foods shall be unadulterated, edible, wholesome, and honestly labeled.

But there was a loophole in the food and drugs act so far as canned foods are concerned. That loophole was plugged up on July 8, 1930, when President Hoover signed the so-called Mapes amendment to the act. And the canning industry was the power that put that amendment through. That last fact is so interesting that I want to repeat it. I said the canning industry itself, not satisfied with standards in vogue before the amendment was passed, fought for a bill that imposes more restrictions on the industry itself. The canners knew that this new amendment is going to save the consumer money and is going to safeguard her when she buys canned goods. The canning industry has learned by rather long experience that what helps the consumer also helps the manufacturer. As I say, it's a 50-50 proposition.

Putting it very briefly, the amendment of July 8 authorizes the Secretary of Agriculture to establish definite standards for canned food products--- excluding only meat and meat food products subject to the meat inspection act, and canned milk---and authorizes him to promulgate a form of label designation for substandard canned foods coming within the jurisdiction of the amendment.

The amendment is on the books. Now it is up to the Secretary of Agriculture to enforce it. He will do this through the Federal Food and Drug Administration. It looks to me like it is going to be a big job, but it will be worth it.

Ever since July 8, the Federal Food and Drug Administration has been working hard to establish standards for a number of canned foods coming within the scope of this administration. On February 16 of this year, the Secretary announced the establishment of standards for canned peaches, pears, and peas. He also announced the words which must be printed prominently upon the labels of those canned foods which fall below the standards set and widely advertised to the trade. In order to give the canners reasonable time to study the new standards and to make any necessary changes in their manufacturing establishments, and to provide for the proper label designation, the Secretary in his order stated that these new standards will not go into effect for 90 days, since the amendment requires a 90-days' notice. Standards for other canned foods will be worked out just as rapidly as possible.

Now, what will the enforcement of this Mapes amendment mean to the consumer? Let us say that you go to the store and ask for a can of tomatoes. If you are one of those who read the labels--- and buy with discrimination--- and accept no substitute for what you really want--- the chances are that you get just about what you ask for and what you pay for. But there are many kinds of canned tomatoes. Some cans contain better tomatoes than others. Some contain whole, ripe, choice tomatoes, packed in their own juice. Some contain inferior but edible tomatoes, or pieces of tomatoes. They may all be wholesome and good to eat. But some kinds may be better, of higher quality than others. The same general principle holds good for other canned foods: corn or peas, cherries or pineapple or pears, salmon or sardines or tuna, pickles or sauerkraut.

Everybody knows that there are different kinds of canned foods just as there are different qualities of fruits and vegetables and the other things that go into cans. Furthermore, there are superior and inferior methods of canning these products. This amendment to the Federal food and drugs act that I am talking about is going to set a quality standard for canned foods coming within its jurisdiction. And there are only two types of canned foods that do not come within its jurisdiction: canned meat and meat products--- not fish and poultry--- and canned milk.

Now for a practical pointer on buying. If a canned food falls below the standard of quality, condition, and fill set by the Secretary of Agriculture, it must bear a plain and conspicuous statement, prescribed by the Secretary, stating that that canned food falls below the standard.

The "plain and conspicuous statement" of low quality which the Secretary has prescribed, and which you should look for in buying canned peaches, pears, and peas, after May 17, 1931, is this: BELOW U. S. STANDARD LOW QUALITY BUT NOT ILLEGAL.

Now remember, that statement will appear on canned pears, peaches, and peas that fall below the standards set by the Mapes amendment. It will not appear on other substandard canned foods, as early as May 17. But it will appear on such canned foods coming within the scope of the amendment just as soon as the Secretary announces to the trade the standards for these products, worked out under the Mapes amendment. These standards will be established and promulgated just as rapidly as possible.

In his announcement of February 16, the Secretary also defined the new standard requirements for fill of container. That simply means how much the can should contain in order to be sold lawfully, without a special declaration. "Canned foods," said the Secretary, "shall be considered as of standard fill if the entire contents occupy 90 per cent or more of the volume of the closed container. Canned foods which fall below the foregoing standard of fill of container, shall bear the name of the article immediately preceded, wherever such name appears, by the words 'SLACK FILLED' in letters of at least equal size and prominence" as those used for the name of the article.

Uncle Sam's food officials say that the value of this new amendment to the food and drugs act to the housewife, to the consumer, will come in the assurance she can have that the canned foods she purchases meet a definite standard established by a Government agency. The amendment will not constitute a bar to the manufacture and sale of "wholesome canned foods" of a quality lower than the standard, but such substandard products will have to be labeled to show their real nature. It is not the Federal Food and Drug Administration's conception of the purpose of Congress that the labeling for substandard foods is intended to stigmatize unduly the article to which it is applied. The amendment makes it very clear that its purpose is to let the consumer know just what goods are below standard, but it is the belief of Federal officials that a substandard product is wholesome and edible. If the food were unwholesome or inedible, its distribution

would be unlawful under the terms of the national pure food laws. In other words, if the budget of the housewife is such as not to permit her to buy the very highest quality canned foods, she can be assured of getting wholesome and edible foods, under the new amendment, even if the can carries the words BELOW U. S. STANDARD LOW QUALITY BUT NOT ILLEGAL.

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ANNOUNCEMENT: Your Veteran Inspector broadcasts one of these UNCLE SAM AT YOUR SERVICE talks each Monday at this hour. He has been on the air for 20 consecutive weeks and plans to continue. Station_____ invites you to tune in on his next talk, which will be broadcast at this hour next Monday.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

MAR 16 1931

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UNCLE SAM AT YOUR SERVICE

RELEASE: March 16, 1931

NOT FOR PUBLICATION

SPEAKING TIME: 11 Minutes.

ANNOUNCEMENT: Well, here's our Veteran Inspector again, all ready with his 80-some-odd UNCLE SAM AT YOUR SERVICE talk. I was thinking that he had just about exhausted his subject, but the inspector tells me that he has found some interesting material about coffee that he wants to tell us. As you know, he has been telling how the Federal Food and Drug Administration safeguards our food and drug supply, and this has been going on for more than a year now, as a result of a cooperative agreement between the United States Department of Agriculture and Station _____. And now let's hear what the inspector has to say about coffee. Mr. Inspector---

--ooOoo--

Well, first I want to try to run the word itself down. We spell it c-o-f-f-e-e. The French and the Spanish spell it c-a-f-e. The Italians spell it c-a-f-f-e, and the Dutch, k-o-f-f-i-e. But the authorities seem to think that the word goes way back to the original Arabic, g-a-h-w-a-h---not directly, but through its Turkish form, k-a-h-v-e-h. Even this wasn't the name of the plant, but of the charming beverage itself.

I have a friend who works in an office. I mean he is supposed to work in an office, but he is very restless and has to go out once in the middle of the morning and once in the middle of the afternoon for his cup of coffee. I have seen him drink as many as four or five cups at a sitting and he says the beverage has a very inspirational effect upon him. I can believe it, becuase he can write more lines in a day than any man I ever know.

But I warrant you that this friend doesn't know as much about history of the beverage as I am going to tell you today. I am not patting myself on the back, mind you. I have been looking it up in the books and talking with the coffee experts in your Federal Food and Drug Administration.

And they tell me that a certain Arabian physician, called Rhazes, mentioned coffee way back in the year 900 A.D. The plant is supposed to have been native to Abyssinia and Persia, from which it probably spread to such tropical countries as Brazil and the Central Americas, from whence we get our largest supply today.

Coffee began as a food. Then it graduated to the standing of a wine. Then it was known as a medicine---finally as a beverage.

As a food, the whole ripe berries, the fruit of the coffee tree, were

crushed into balls and held in shape with fat. There are still a few tribes who take their coffee this way.

Later they took the juice from the ripe fruit and fermented it. The result was a wine, which I imagine was delicious.

Then around the 13th or 14th centuries, someone discovered the method of roasting and boiling dried coffee beans, so familiar today. Personally, I would like to erect a monument to him.

And then pretty soon religious devotees began drinking coffee in order to keep awake during religious ceremonies.

And then came the coffee house---and then attempts to prohibit the use of coffee. These attempts failed, and coffee houses soon became the meeting places of writers, politicians, artists, tall talkers, and husbands who were not understood by their wives.

These coffee houses spread all over Europe and English literature of the best tradition is full of references to them. I understand that two or three of the most famous and oldest are still running in London. I happen to know---because I have drunk coffee there---that a famous old coffee house in the New Orleans French market is still attracting its full share of friends of the berry.

Speaking of New Orleans, it hasn't been so long since I had the pleasure of visiting the docks where the coffee ships unload, with E. C. Boudreaux, head of the Food and Drug Administration's laboratory in that city.

These docks are a marvel of architecture and convenience. Great two-story buildings of cement and steel, they house some three million sacks of coffee a year. A sack of coffee wieghs around 132 pounds. Mr. Boudreaux told me that about 72 coffee ships unload at New Orleans each year, which is approximately one every five days. You might not think this very many, if you don't know that these ships average 42,000 bags each. While I was down there, most of the coffee on the wharves had come up from the cooler uplands of Brazil, from whence we get the bulk of our coffee. We also get it, of course, from other States in South America, from Central America, and the West Indies.

There were great piles of sacked coffee all over the place.

This coffee is shipped green or unroasted to dealers, wholesalers, roasters, all over the central United States. Much of the coffee designed for other sections of this country is received at New York, San Francisco, or other ports.

But all of it goes through the same thorough inspection by the Government's trained coffee inspectors.

We are getting a lot better coffee today than we did 20 years ago. Back in 1909, the Secretary of Agriculture, James Wilson, approved a statement by a Board of Food and Drug Inspection. He said that the Department had investigated the sale and shipment, within the jurisdiction of the food and drugs act of June 30, 1906, of decomposed, imperfect and damaged coffee-----As a result of the investigation and the evidence adduced at the hearing, he announced that the product ordinarily known as 'Black Jack,' consisting of decomposed berries, was regarded by the Department as adulterants in coffee and that the food and drugs act forbade its shipment or sale within the jurisdiction of the act.

The statement went on to say that coffee which had been damaged by water during shipment---or which had acquired a permanent offensive odor---or which contained immature berries, ordinarily known as "Quakers"---would be considered adulterated within the meaning of the food and drugs act and prohibited shipment in interstate commerce.

I didn't see much coffee like that when I was in New Orleans and I haven't seen much like that when I have visited the docks in New York. We do, of course, find some coffee containing foreign material, such as seeds, sticks, stones, etc., but since coffee is carefully graded and carefully handled in the roasting and grinding process, it is quite rare indeed for you to find coffee so inferior as that mentioned way back in 1909. We do occasionally find, however, adulterated and misbranded coffees on sale, and are obliged to take action accordingly. As you all know, the food and drugs act condemns the mixing of food or drug commodities so as to lower or injure their quality or strength. In past years, and perhaps to some extent today, green coffee has been imported into the United States mislabeled as to the country from which it really came. This for the reason that some countries produce better coffee than others. But the national pure food laws specifically make illegal false labeling of foods and drugs concerning the country in which they are produced. And so Uncle Sam's inspectors have to see that the coffee imported is correctly labeled as to country of origin.

Occasionally inspectors will find coffee containing excessive amounts of black beans, or dirt or small sticks, or other foreign material. They sample the coffee at the docks---examine it for inhibited material---and report their findings. Sometimes a certain lot will show such gross adulteration or impurity that the Government will condemn or detain the shipment. The Government specifies coffees of grades lower than No. 8 of the New York Sugar and Coffee Exchange as unsuitable for entry into the United States.

When the coffee is landed, it goes to the roasters and grinders, where it is prepared for the retail trade. I remember that we used to find gross forms of adulteration in ground coffee, years ago. But I can very truthfully say that finding such adulteration today is extremely rare. The coffee trade as a whole is cooperating wholeheartedly with the Food and Drug Administration to improve the quality of the berries that go into our national coffee cup.

I suppose that the commonest coffee adulterant is chicory. Chicory is absolutely harmless and some people like it in their coffee. For example, some people in New Orleans like it in their coffee---and all through the Latin-Americas mixtures of chicory and coffee are the rule rather than the exception. Now, of course, the Food and Drug Administration has absolutely no jurisdiction over the coffee that reaches the trade in other countries, but the Administration does say that when chicory is used in coffee in this country, and the mixture is shipped in interstate commerce, it must be declared on the label. While chicory is wholesome, it simply is not coffee and it is only fair that a buyer who wants pure coffee---and pays her money for pure coffee---should not get a chicory-coffee mixture. Since the chicory is declared, all the buyer has to do is to read the label.

Uncle Sam's inspectors occasionally find a violation of the pure food laws in the form of short-weight coffee packages. They take prompt steps to correct such mischievous practices---going to court about it, if necessary.

The buyer's assurance of getting full-weight coffee packages is to note the quantity of contents statement on the label. If, for example, you want a full pound of coffee and think you are paying the price of a full pound, better read the label to see that it does not say 14 ounces. The chances are against your finding short-weight packages, but after all they are occasionally sold.

Mr. Boudreaux is a coffee expert. In the first place, he is a native Louisianan, and native Louisianans know what goes into coffee cups. Speaking unofficially, he told me that a good grade of coffee, pure and well-prepared for coffee making, will make a better cup than an indifferent coffee. He said that some people want their coffee light roasted---others want it medium---or Mobile---or New Orleans roasted. Some like it dark, some, light. Down in New Orleans they prefer what is called French-Drip coffee. They never boil the coffee with the water, any more than a good tea maker will boil the leaves with the water. They pour the boiling water over the coffee---SLOWLY. There are special urns and strainers for the job. Coffee, like olives, is rather a matter of taste. And I might say that we Federal food officials have certain definite ideas on what coffee should be when it is sold as coffee.

--ooOoo--

ANNOUNCEMENT: You have just heard another of the Veteran Inspector's UNCLE SAM AT YOUR SERVICE talks. Through the courtesy of the United States Department of Agriculture, Station _____ broadcasts these talks each Monday. There will be another one next Monday and you are cordially invited to hear it.

UNITED STATES DEPARTMENT OF AGRICULTURE

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UNCLE SAM AT YOUR SERVICE Monday, March 23, 1931

NOT FOR PUBLICATION

Speaking Time: 10 Minutes.

ANNOUNCEMENT: Drugs and medicines are of vital importance to all of us. Sometimes they save our lives. They relieve our pain or cure our maladies. And the Federal Food and Drug Administration keeps an eagle eye on drugs that are imported into this country and on medical preparations that are manufactured here. But let's let the Veteran Inspector tell about that. He represents the U. S. Department of Agriculture at Station_____ and comes to you today with the latest talk in his UNCLE SAM AT YOUR SERVICE series. Mr. Inspector.----

--ooOoo--

My friends, I have something that will interest you today.

At least, it will interest you if you have ever been sick--- or ever expect to be.

I have here a report direct from Washington. It deals with what Government officials did during the fiscal year 1930 to protect our drug supply. Kind of a sickness insurance report.

Let's just sit here for 10 minutes and turn the pages and see what we can find---

Let's start at the beginning--- crude drugs.

Crude drugs have always interested me immensely. There are so many of them and they come from such widely separated corners of the world that it is almost a lesson in geography--- and, incidentally, in botany--- to study them. I wonder how many of you know that officials of the Federal Food and Drug Administration have to inspect and identify more than 300 different imported crude drugs each year. Some of these come in in huge quantities. Some just dribble in. Most of our crude drugs are imported through New York and Philadelphia.

I won't have time to tell you very much about the inspection of crude drugs as they reach our shores. Suffice it to say that the Government carefully inspects all shipments to see that the drugs are pure and in good condition. It is highly important, you know, that crude drugs which go into the manufacture of medicines be pure and exactly what they are represented to be. Let's just take a case. During the fiscal year 1930, Government men paid a great deal of attention to shipments of crude ergot. Ergot comes principally from Spain and Russia and Federal inspectors found, out of 36 shipments, six lots, totaling more than 32,000 pounds, that were low strength or contained impurities. The Government refused to let this ergot enter

the country and of all ergot examined the Government detained more than 31%.

Take another highly important crude drug, nux vomica. This is the flattened, disc-like seed of a southern Asiatic tree, and we use it in the manufacture of strychnine. Strychnine is a highly important drug and it is vital that it be prescribed in hair-trigger dosage, otherwise the results might be fatal. Your officials are very careful to see that nux vomica imported into this country is of standard quality.

I could go on telling you about other drugs indefinitely. I could tell you that the Government refused entry to about 9% of the ipecac root imported in that period, and this was for the reason that the root was either low in alkaloids or contained excessive mineral matter. Equal diligence was exercised in the inspection of licorice root, aloe, balsam of Peru, cinchona bark, kamala, sandalwood, senna, and scores of other important crude drugs.

So much for crude-drug imports. Now, let's follow them through into the manufacture of the medicines that reach our homes. Let's see if the Government stops at making sure that imported crude drugs are of the standard required by the food and drugs act. I think you will find that the Government does not stop there.

One of the important projects of the Food and Drug Administration every year is the inspection of plants in which drugs and pharmaceuticals are manufactured. During the fiscal year 1930, the Eastern District of the Administration collected 300 samples, representing the products of 40 different manufacturers, and examined them thoroughly. These samples included tinctures, fluid extracts, tablets for various uses, and so on. As a result of this survey, action was taken against 10 manufacturers because 44 of the products they were making failed to meet the requirements of the food and drugs act. As a whole, however, the survey showed that drug manufacturers were doing pretty good work. Similar surveys were conducted by the Administration's Central and Western Districts. The Central District, for example, found that a certain manufacturer was not putting out the kind of asthma tablets that he claimed. These tablets were deficient in iodide and bromide, misbranded with respect to curative claims--- and the Government seized 7,000 of them. That's just one sample of regulatory action under the law.

Here's an interesting item on page 84. It says here that the Government continued its annual surveys of fluid extract of ergot during the year. The officials collected more than 100 samples, many of them from the manufacturers' own establishments. Some of the fluid extract of ergot was found to be of low potency and the Government seized it.

Two or three years ago, the quality of our imported cod liver oil was none too high. But an intensive campaign to clean up this situation resulted, in 1930, in a greatly improved condition. During the year, almost 2½ million gallons of cod liver oil were examined, most of which was found to be of high quality.

You've been hearing a great deal recently about acidophilus milk. Specialists hold that bacterial cultures of milk are of value only when they contain large numbers of living organisms of a pure strain. In the past,

many acidophilus preparations on the market proved to be totally without value. But a careful study of the situation showed that acidophilus products are of better quality now than they used to be. Nevertheless, the Government seized a number of lots of this product on the ground that they contained no living bacteria or were either inert or low in content of bacteria.

If you were going to the hospital for an operation tomorrow -- unless you preferred having it done in the ancient manner, that is, without an anaesthetic -- you would want to be very sure that the ether was of good quality. Ether, you know, sometimes goes through changes in storage and develops what the chemists call aldehydes and peroxide. The United States Pharmacopoeia specifies that ether used for medicinal purposes must not contain aldehyde or peroxide. The Food and Drug Administration has been giving close attention to the ether supply for a long time. Year after year, action has been taken to remove from the market supplies of ether that fail to meet the high standard imposed for anaesthetic use. Last year the work was continued and in a survey of the anaesthetic field the government seized thousands of cans of ether that did not come up to the specifications of the U. S. Pharmacopoeia. The Administration found, however, that this close scrutiny of methods of manufacture and shipment of ether had brought about a greatly improved quality in 1930 as compared with the two previous years.

And here on page 86 is a statement which should interest you if you ever use antiseptics. Antiseptics receive their fair share of attention by Federal officials year after year. These officials visited hundreds of manufacturing plants--- checked up on antiseptic supplies in drug stores--- analyzed scores of different antiseptics----and took action under the food and drugs act against a number that were misbranded as to curative claims, or other claims, or were adulterated.

You may be interested in knowing that the Government collected and examined 1500 samples of proprietary preparations during the period we have in mind. 219 lots of these were seized because they were misbranded with respect to medicinal or therapeutic claims. The medicines collected and studied include so-called tuberculosis remedies, pneumonia compounds, chill tonics, nerve tonics, rejuvenators, bitters, medicated plasters and other preparations. The Food and Drug Administration holds that it is unlawful for manufacturers to label their medicinal products with curative claims which these products cannot possibly be expected to make good. Medical men in the Administration believe that it is not only a waste of money for people to buy worthless fake medicines, but that it is a waste of very important time as well. When a disease attacks you, and is gaining headway, and when every day counts, it is not wise for you to put your trust in worthless remedies. The food and drugs act was designated to protect the health of the public. I have in this talk today briefly shown you a few ways in which your Government enforced that act last year, so far as drugs and medicines are concerned. The same work goes on year after year.

--oOo--

ANNOUNCEMENT: The Veteran Inspector has been telling you how the Government proceeds to enforce the food and drugs act so far as drugs are concerned. He is an official spokesman of the Food and Drug Administration at Station____ and goes on the air each Monday with one of his UNCLE SAM AT YOUR SERVICE talks. Look for him one week from today at this hour.

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UNCLE SAM AT YOUR SERVICE

RELEASE: Monday, March 30, 1931

NOT FOR PUBLICATION

SPEAKING TIME: 10 Minutes

ANNOUNCEMENT: The Veteran Inspector---who speaks for the Federal Food and Drug Administration at Station _____---tells me that he has a special talk for you today. And it deals with a very common subject: Water. You may think you know a lot about water, probably do, but there are always new things to learn, even about the oldest subjects. Let's hear what the Inspector has to say----

--ooOoo--

My friends, I'm not going to pose as an authority on water. But I was in Washington recently and, while there, talked with a man who is. He is J. W. Sale of your Federal Food and Drug Administration and has been studying water for a long time. What I'm going to say is just what Mr. Sale told me---and, for the most part, in his own words.

I'm not going to talk to you today about the bottled waters which some of you may use on your tables, but about the common, ordinary supply of drinking water from well or faucet or spring. Of course the Food and Drug Administration, which enforces the Federal food and drugs act, watches over the purity and correct labeling of your bottled table water.

I don't need to labor the point of the importance of a good water supply to the farm or the city family. The greatest tragedy the poet could imagine was:

"Water, water, everywhere
Nor any drop to drink."

So, I simply ask you to give heed, before the heavy water-drinking season starts, to this question, "What kind of water does our family drink?"

Well, the answer doesn't depend at all upon the chemically pure water---the H_2O---in your family supply. It depends upon the kinds and quantities of things other than water contained in the water.

There may be organic matter in your water supply; there may be, almost undoubtedly is, inorganic matter in it. The organic matter may include bacteria of both harmless and harmful types, extractions of soil and sewage, or their decomposition products. I'll have more to say later about removing harmful organic matter from your drinking water supply.

The inorganic matter in your water supply will include mineral salts of various kinds---perhaps common salt; perhaps Glauber's or Epsom salts; perhaps

dissolved limestone. Some of these salts make water "hard." They give different waters their characteristic flavors.

Water may be temporarily or permanently "hard." That is to say, the hardness may be removed by boiling. That is temporary hardness. Permanent hardness cannot be removed by boiling. Now it is possible, by the use of chemicals, to reduce either temporary or permanent hardness of water. However, I should not advise any inexperienced person to attempt to remove hardness from drinking water by the use of chemicals. If you want to procure a soft-water supply for all household uses, and are prepared to make a considerable outlay for the purpose, you had better buy water-softening apparatus. The names of manufacturers of such apparatus can be obtained from a trade directory. I may say that the heavy expense of installation usually makes it impracticable to put water-softening apparatus in the farm home. You can soften water to be used only for cleansing purposes by the use of ammonia or borax.

Aside from "hardness," inorganic materials sometimes cause water to be cloudy or turbid, and thus to be unsuited for drinking. This is especially true of water from newly dug wells. Usually, however, the water from such wells will become clear after a few months. Nearly always the turbidity is due to finely divided clay or sand that persists in staying in suspension. Remember this caution about turbid water; if it becomes cloudy and turbid after rains, it is quite likely to be polluted and potentially dangerous to health. The usual method of removing turbidity is filtering the water through sand and gravel. You can buy water filters on the market or you can build them at home from concrete by following the directions in Farmers' Bulletin 1448.

So much for hardness and turbidity of drinking water. Now we come to odors of drinking water, and to learn how to deal with them, we have to go back and pick up our classification of what affects the quality of drinking water. Hardness and turbidity are caused by inorganic matter. But odors sometimes are due to organic matter---to various types of microscopic organisms; them again, odors may be caused by inorganic matter, by hydrogen sulfide gas, or by earth or clay.

Now it is not generally believed that organisms which cause odors in water are injurious to health, nor is it thought that the chemical substances causing odors harm health. But water containing odor-creating organisms is objectionable from the esthetic standpoint, and it is possible that their presence in large numbers may cause temporary intestinal disorders. Bad odors may be caused by sewage or other pollution, in which case the water may be highly dangerous to health. Frequently filtration through sand or charcoal or both will remove or greatly reduce objectionable odors. This treatment, however, cannot be depended upon to remove all disease-producing organisms.

There is no way of proving that a water is polluted with disease-producing organisms other than by laboratory analysis or by showing that a particular water supply is the direct cause of illness. Bad odor or taste, a cloudy or turbid appearance of the water after rains, and the development of intestinal disorders after drinking it sometimes indicate a polluted water supply. On the other hand, bad odor is often due to causes other than pollution, and a sparkling clear water may convey disease. Suspected water should always be analyzed as soon as possible and suitable remedial measures taken if pollution is proved.

The United States Department of Agriculture can not analyze water for individuals, and many States are subject to similar restrictions. Specific inquiries regarding pollution of water, analyses, etc., can best be answered by State health officials, who are familiar with local conditions. Do not drink water believed to be polluted unless there is no other water available, in which case heat the water until it boils vigorously, or disinfect it by the addition of a minute quantity of some suitable chemical. It is not possible to indicate the exact amount of chemical which will just sterilize a particular water without introducing an excess of the chemical since waters of varying composition react differently toward the added chemical. Usually, clear water is more readily disinfected than turbid or muddy water. However, clear and sparkling waters may contain relatively large quantities of oxidizable substances such as ferrous iron, and the harmful bacteria contained in them may not be killed by ordinary doses of the disinfectant. In order to disinfect drinking water without introducing an excess of chemical, a laboratory test should be made. As this is frequently impracticable when an emergency exists, I will give you directions for the addition of a chemical to water suspected to be polluted, which will in most instances render it safe to drink. The chemical which I am going to ask you to remember is one that is contained or should be contained in every medicine cabinet. It is tincture of iodine, I-O-D-I-N-E. If you do not have a bottle of tincture of iodine in your medicine cabinet you can purchase it at small cost at any drug store. The tincture contains approximately 7% of iodine. Now listen carefully to the directions for the addition of the tincture to polluted water. They are as follows: Mix 1 drop of the tincture thoroughly with 1 quart of water. The water so treated will usually be safe for drinking purposes after 30 minutes have elapsed. Proportional mixtures for other quantities of water are as follows: 11 drops of tincture in 2-3/4 gallons of water (an ordinary pail full), 1 tablespoonful or 3 teaspoonfuls of tincture in 52 gallons of water (a large barrel, approximate inside middle diameter 24 inches, end diameters 20 inches, depth 30-3/4 inches). The use of iodine in emergencies is excellent. But it is best in the long run to clean up the water supply.

Another method of disinfecting water is by means of tablets containing a compound of chlorine. Such tablets together with directions for use can be obtained at many drug stores.

If your home water supply is beyond suspicion, the directions which I have just given will come in handy when you take that long automobile trip this summer. You will find it a simple matter to mix the requisite quantity of tincture of iodine to the water in your vacuum bottle, and by taking this simple precaution avoid the sick spell which not infrequently results from drinking polluted water.

There is one more thing I shall ask you to remember. You will find a lot of interesting information about water supplies and water treatment in two publications that we shall be glad to send you on request without cost to you. They are Farmers' Bulletin 1448 called "Farmstead Water Supply" and Yearbook Separate 1040 called "Water Supply of Rural Communities Frequently Requires Purification." Just ask for them by number: Farmers' Bulletin 1448 and Yearbook Separate 1040 and address your request to the U. S. Department of Agriculture, Washington, D. C., or to the station to which you are listening.

--ooOoo--

ANNOUNCEMENT: Thank you, Mr. Inspector. And now I just want to repeat the numbers of those free publications. Farmers' Bulletin 1448-F, called THE FARMSTEAD WATER SUPPLY, and Yearbook Separate 1040-Y, called WATER SUPPLY FOR RURAL COMMUNITIES FREQUENTLY REQUIRES PURIFICATION. Write Station _____ for your copies. Another Veteran Inspector talk next Monday.